PONY in Math

in

Math
+ − × ÷ =

Primary
Exercises 4 2014

SECOND TERM

Unit 1

Fractions

and

Decimals

Exercises

Write the fraction :

Half = —

Quarter = —

third = —

One fifth = —

two sixths = —

three eighths = —

one tenth = —

Three quarters = —

Two thirds = —

Four sevenths = —

Three eighths = —

Five ninths = —

Nine tenths = —

Write the fraction in words:

$\dfrac{1}{2}$ = ...

$\dfrac{1}{3}$ = ...

$\dfrac{1}{4}$ = ...

$\dfrac{2}{3}$ = ...

$\dfrac{3}{4}$ = ...

$\dfrac{1}{5}$ = ...

$\dfrac{2}{5}$ = ...

$\dfrac{2}{6}$ = ...

$\dfrac{3}{7}$ = ...

$\dfrac{4}{8}$ = ...

$\dfrac{5}{9}$ = ...

$\dfrac{3}{10}$ = ...

$\dfrac{1}{7}$ = ...

$\dfrac{1}{9}$ = ...

$\dfrac{3}{5}$ = ...

$\dfrac{5}{8}$ = ...

3

Write the fraction :

$$\frac{......}{......}$$
$$\frac{......}{......}$$
$$\frac{......}{......}$$
$$\frac{......}{......}$$

$$\frac{......}{......}$$
$$\frac{......}{......}$$
$$\frac{......}{......}$$
$$\frac{......}{......}$$
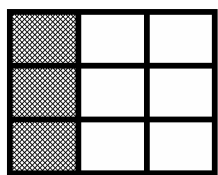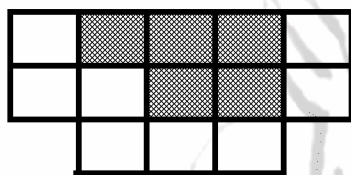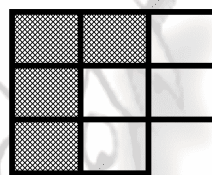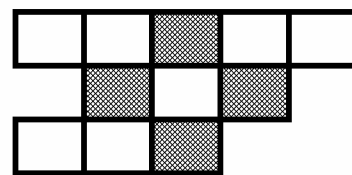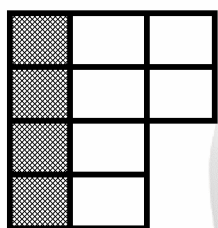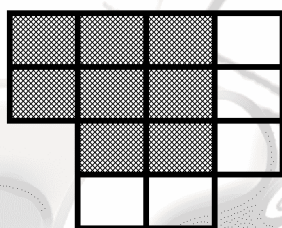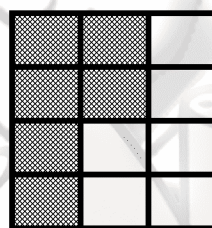
Colour according to the fraction :-

$$\frac{5}{6}$$
$$\frac{5}{9}$$
$$\frac{1}{3}$$
$$\frac{1}{2}$$
$$\frac{1}{4}$$
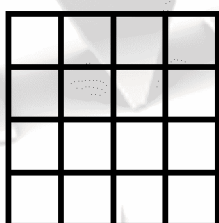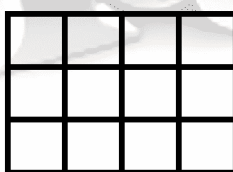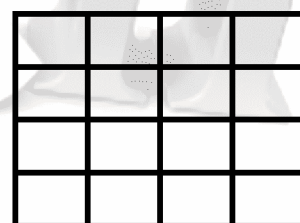
$$\frac{1}{6}$$
$$\frac{5}{8}$$
$$\frac{1}{3}$$
$$\frac{1}{2}$$
$$\frac{3}{4}$$

Complete

$1 = \dfrac{3}{\text{......}} = \dfrac{\text{......}}{8} = \dfrac{10}{\text{......}} = \dfrac{5}{\text{......}}$ $\Bigg|$ $\dfrac{1}{4} = \dfrac{\text{......}}{8} = \dfrac{3}{\text{......}} = \dfrac{\text{......}}{20} = \dfrac{10}{\text{......}}$

$\dfrac{1}{2} = \dfrac{5}{\text{......}} = \dfrac{3}{\text{......}} = \dfrac{6}{\text{......}} = \dfrac{\text{......}}{20}$ $\Bigg|$ $\dfrac{2}{3} = \dfrac{\text{......}}{6} = \dfrac{6}{\text{......}} = \dfrac{\text{......}}{15} = \dfrac{20}{\text{......}}$
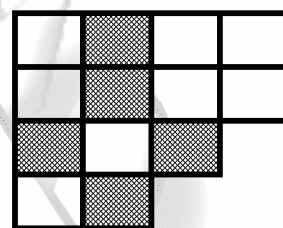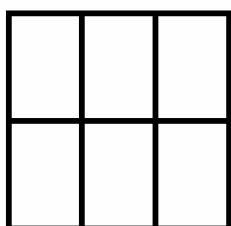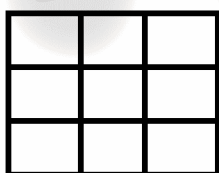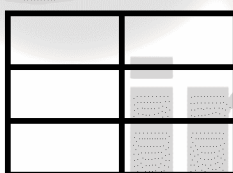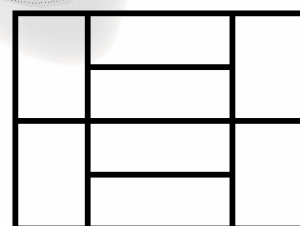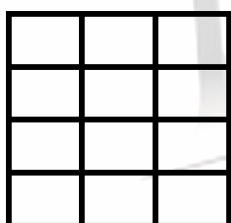
$2 = \dfrac{6}{\text{......}} = \dfrac{\text{......}}{3} = \dfrac{10}{\text{......}} = \dfrac{12}{\text{......}}$ $\Bigg|$ $\dfrac{3}{4} = \dfrac{\text{......}}{8} = \dfrac{9}{\text{......}} = \dfrac{\text{......}}{20} = \dfrac{30}{\text{......}}$

$\dfrac{2}{5} = \dfrac{4}{\text{......}} = \dfrac{6}{\text{......}} = \dfrac{8}{\text{......}} = \dfrac{\text{......}}{25}$ $\Bigg|$ $\dfrac{1}{3} = \dfrac{3}{6} = \dfrac{\text{......}}{15} = \dfrac{6}{\text{......}}$

Simplify :

$\dfrac{6}{12} = $ $\dfrac{7}{21} = $

$\dfrac{5}{20} = $ $\dfrac{15}{27} = $

$\dfrac{8}{24} = $ $\dfrac{9}{27} = $

$\dfrac{6}{24} = $ $\dfrac{24}{36} = $

Complete :

$\dfrac{70}{10} = \dfrac{\text{......}}{1} = \text{......}$ $\dfrac{20}{5} = \dfrac{\text{......}}{1} = \text{......}$

$\dfrac{28}{7} = \dfrac{\text{......}}{\text{......}} = \text{......}$ $\dfrac{9}{3} = \dfrac{\text{......}}{\text{......}} = \text{......}$

$\dfrac{30}{10} = \dfrac{\text{......}}{\text{......}} = \text{......}$ $\dfrac{90}{3} = \dfrac{\text{......}}{\text{......}} = \text{......}$

$\dfrac{36}{6} = \dfrac{\text{......}}{\text{......}} = \text{......}$ $\dfrac{15}{3} = \dfrac{\text{......}}{\text{......}} = \text{......}$

Improper fractions and Mixed numbers

Put each of the following in the form of an improper fraction:

$3\dfrac{1}{9} = \underline{\quad}$

$7\dfrac{4}{5} = \underline{\quad}$

$3\dfrac{2}{9} = \underline{\quad}$

$5\dfrac{2}{5} = \underline{\quad}$

$2\dfrac{3}{8} = \underline{\quad}$

$4\dfrac{4}{5} = \underline{\quad}$

$5\dfrac{3}{4} = \underline{\quad}$

$4\dfrac{2}{3} = \underline{\quad}$

$3\dfrac{1}{3} = \underline{\quad}$

$2\dfrac{1}{4} = \underline{\quad}$

$2\dfrac{1}{5} = \underline{\quad}$

$1\dfrac{1}{2} = \underline{\quad}$

$1\dfrac{2}{3} = \underline{\quad}$

$3\dfrac{4}{5} = \underline{\quad}$

$2\dfrac{3}{4} = \underline{\quad}$

$5\dfrac{5}{11} = \underline{\quad}$

$7\dfrac{7}{8} = \underline{\quad}$

$4\dfrac{7}{9} = \underline{\quad}$

$1\dfrac{3}{5} = \underline{\quad}$

$2\dfrac{1}{5} = \underline{\quad}$

$9\dfrac{2}{7} = \underline{\quad}$

Put each of the following in the form of a mixed number :

$\dfrac{25}{4} = \underline{\quad}$

$\dfrac{21}{5} = \underline{\quad}$

$\dfrac{15}{4} = \underline{\quad}$

$\dfrac{7}{3} = \underline{\quad}$

$\dfrac{12}{7} = \underline{\quad}$

$\dfrac{10}{3} = \underline{\quad}$

$\dfrac{8}{3} = \underline{\quad}$

$\dfrac{11}{4} = \underline{\quad}$

$\dfrac{7}{3} = \underline{\quad}$

$\dfrac{9}{4} = \underline{\quad}$

$\dfrac{16}{5} = \underline{\quad}$

$\dfrac{9}{2} = \underline{\quad}$

$\dfrac{8}{3} = \underline{\quad}$

$\dfrac{9}{2} = \underline{\quad}$

$\dfrac{11}{4} = \underline{\quad}$

$\dfrac{24}{5} = \underline{\quad}$

$\dfrac{36}{7} = \underline{\quad}$

$\dfrac{45}{7} = \underline{\quad}$

Complete:

$$\frac{14}{3} = \dots\frac{\dots}{\dots}$$

$$\frac{40}{4} = \dots\dots$$

$$\frac{15}{3} = \dots\dots$$

$$\frac{9}{5} = \dots\frac{\dots}{\dots}$$

$$\frac{20}{3} = \dots\frac{\dots}{\dots}$$

$$\frac{36}{6} = \dots\dots$$

$$\frac{25}{5} = \dots\dots$$

$$\frac{60}{12} = \dots\dots$$

$$\frac{45}{9} = \dots\dots$$

$$\frac{49}{7} = \dots\dots$$

$$\frac{40}{7} = \dots\frac{\dots}{\dots}$$

$$\frac{45}{7} = \dots\frac{\dots}{\dots}$$

$$4\frac{1}{3} = \frac{\dots}{\dots}$$

$$3\frac{3}{4} = \frac{\dots}{\dots}$$

$$\frac{16}{5} = \dots\frac{\dots}{\dots}$$

$$4\frac{2}{2} = \frac{\dots}{\dots}$$

$$3\frac{5}{7} = \frac{\dots}{\dots}$$

$$\frac{32}{5} = \dots\frac{\dots}{\dots}$$

$$6\frac{3}{5} = \frac{\dots}{\dots}$$

$$4\frac{5}{7} = \frac{\dots}{\dots}$$

$$\frac{80}{9} = \dots\frac{\dots}{\dots}$$

$$4\frac{1}{6} = \frac{\dots}{\dots}$$

$$6\frac{2}{7} = \frac{\dots}{\dots}$$

$$\frac{32}{5} = \dots\frac{\dots}{\dots}$$

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Convert the following fractions so that they have the common denominators

$$\frac{1}{2} \quad , \quad \frac{1}{6}$$

$$\frac{1}{2} = \frac{}{}$$

$$\frac{1}{6} = \frac{}{}$$

$$\frac{1}{2} \quad , \quad \frac{5}{8}$$

$$\frac{1}{2} = \frac{}{}$$

$$\frac{5}{8} = \frac{}{}$$

$$\frac{1}{6} \quad , \quad \frac{3}{4}$$

$$\frac{1}{6} = \frac{}{}$$

$$\frac{3}{4} = \frac{}{}$$

$$\frac{3}{8} \quad , \quad \frac{1}{6}$$

$$\frac{3}{8} = \frac{}{}$$

$$\frac{1}{6} = \frac{}{}$$

$$\frac{3}{4} \quad , \quad \frac{6}{7}$$

$$\frac{3}{4} = \frac{}{}$$

$$\frac{6}{7} = \frac{}{}$$

$$\frac{1}{3} \quad , \quad \frac{1}{9}$$

$$\frac{1}{3} = \frac{}{}$$

$$\frac{1}{9} = \frac{}{}$$

$$\frac{5}{6} \quad , \quad \frac{7}{12}$$

$$\frac{5}{6} = \frac{}{}$$

$$\frac{7}{12} = \frac{}{}$$

$$\frac{5}{8} \quad , \quad \frac{7}{12}$$

$$\frac{5}{8} = \frac{}{}$$

$$\frac{7}{12} = \frac{}{}$$

$$\frac{1}{5} \quad , \quad \frac{3}{4}$$

$$\frac{1}{5} = \frac{}{}$$

$$\frac{3}{4} = \frac{}{}$$

$$\frac{8}{9} \quad , \quad \frac{1}{7}$$

$$\frac{8}{9} = \frac{}{}$$

$$\frac{1}{7} = \frac{}{}$$

Convert the following fractions so that they have the common denominators

$$\frac{1}{2} \ , \ \frac{1}{3} \ , \ \frac{1}{6}$$

$$\frac{1}{2} = \frac{\ldots}{\ldots} \ , \ \frac{1}{6} = \frac{\ldots}{\ldots}$$

$$\frac{1}{3} = \frac{\ldots}{\ldots}$$

$$\frac{1}{3} \ , \ \frac{1}{4} \ ; \ \frac{1}{12}$$

$$\frac{1}{3} = \frac{\ldots}{\ldots} \ , \ \frac{1}{12} = \frac{\ldots}{\ldots}$$

$$\frac{1}{4} = \frac{\ldots}{\ldots}$$

$$\frac{1}{2} \ , \ \frac{1}{4} \ , \ \frac{5}{8}$$

$$\frac{1}{2} = \frac{\ldots}{\ldots} \ , \ \frac{5}{8} = \frac{\ldots}{\ldots}$$

$$\frac{1}{4} = \frac{\ldots}{\ldots}$$

$$\frac{5}{6} \ , \ \frac{7}{12} \ , \ \frac{2}{3}$$

$$\frac{5}{6} = \frac{\ldots}{\ldots} \ , \ \frac{2}{3} = \frac{\ldots}{\ldots}$$

$$\frac{7}{12} = \frac{\ldots}{\ldots}$$

$$\frac{1}{6} \ , \ \frac{3}{4} \ , \ \frac{2}{3}$$

$$\frac{1}{6} = \frac{\ldots}{\ldots} \ , \ \frac{2}{3} = \frac{\ldots}{\ldots}$$

$$\frac{3}{4} = \frac{\ldots}{\ldots}$$

$$\frac{5}{8} \ , \ \frac{7}{12} \ , \ \frac{3}{4}$$

$$\frac{5}{8} = \frac{\ldots}{\ldots} \ , \ \frac{7}{12} = \frac{\ldots}{\ldots}$$

$$\frac{3}{4} = \frac{\ldots}{\ldots}$$

$$\frac{3}{8} \ , \ \frac{1}{6} \ , \ \frac{3}{4}$$

$$\frac{3}{8} = \frac{\ldots}{\ldots} \ , \ \frac{3}{4} = \frac{\ldots}{\ldots}$$

$$\frac{1}{6} = \frac{\ldots}{\ldots}$$

$$\frac{1}{5} \ , \ \frac{3}{4} \ , \ \frac{3}{8}$$

$$\frac{1}{5} = \frac{\ldots}{\ldots} \ , \ \frac{3}{8} = \frac{\ldots}{\ldots}$$

$$\frac{3}{4} = \frac{\ldots}{\ldots}$$

$$\frac{3}{4} \ , \ \frac{6}{7} \ , \ \frac{1}{3}$$

$$\frac{3}{4} = \frac{\ldots}{\ldots} \ , \ \frac{1}{2} = \frac{\ldots}{\ldots}$$

$$\frac{6}{7} = \frac{\ldots}{\ldots}$$

$$\frac{8}{9} \ , \ \frac{1}{3} \ , \ \frac{1}{5}$$

$$\frac{8}{9} = \frac{\ldots}{\ldots} \ , \ \frac{3}{5} = \frac{\ldots}{\ldots}$$

$$\frac{1}{7} = \frac{\ldots}{\ldots}$$

Comparing and ordering fractions

1 Put the suitable sign (>) , (<) or (=) in the blanks :

a $\dfrac{1}{5} \boxed{} \dfrac{4}{5}$ **b** $\dfrac{9}{10} \boxed{} \dfrac{3}{10}$ **c** $\dfrac{7}{9} \boxed{} \dfrac{9}{9}$

d $\dfrac{2}{8} \boxed{} \dfrac{2}{4}$ **e** $\dfrac{1}{7} \boxed{} \dfrac{1}{3}$ **f** $\dfrac{3}{4} \boxed{} \dfrac{3}{5}$

g $0.7 \boxed{} \dfrac{7}{3}$ **h** $\dfrac{1}{3} \boxed{} 1$ **i** $1 \boxed{} \dfrac{3}{4}$

j $\dfrac{5}{6} \boxed{} \dfrac{15}{7}$ **k** $\dfrac{2}{3} \boxed{} \dfrac{3}{2}$ **l** $\dfrac{4}{3} \boxed{} \dfrac{3}{5}$

2 Put the suitable sign (>) , (<) or (=) in the blanks :

a $\dfrac{4}{12} \boxed{} \dfrac{1}{2}$ **b** $\dfrac{4}{5} \boxed{} \dfrac{3}{4}$ **c** $\dfrac{5}{8} \boxed{} \dfrac{2}{3}$

d $2\dfrac{1}{4} \boxed{} 2\dfrac{1}{3}$ **e** $3\dfrac{5}{12} \boxed{} 4\dfrac{4}{9}$ **f** $2\dfrac{5}{6} \boxed{} 2\dfrac{2}{3}$

g $7 \boxed{} 6\dfrac{6}{9}$ **h** $5\dfrac{1}{12} \boxed{} \dfrac{11}{12}$ **i** $\dfrac{18}{6} \boxed{} 3$

j $\dfrac{0}{7} \boxed{} \dfrac{1}{8}$ **k** $\dfrac{8}{5} \boxed{} 1\dfrac{1}{6}$ **l** $2\dfrac{3}{4} \boxed{} \dfrac{5}{2}$

3 Choose the correct answer between brackets :

a $\dfrac{4}{5} \dots\dots \dfrac{5}{8}$ $(< \ or \ > \ or \ =)$

b $\dfrac{5}{6} \dots\dots \dfrac{4}{7}$ $(< \ or \ > \ or \ =)$

c $\dfrac{8}{9} > \dots\dots$ $(\dfrac{7}{8} \ or \ \dfrac{9}{10} \ or \ \dfrac{19}{20} \ or \ \dfrac{14}{15})$

d $\dfrac{9}{10} < \dots\dots$ $(\dfrac{14}{20} \ or \ \dfrac{17}{20} \ or \ \dfrac{15}{20} \ or \ \dfrac{19}{20})$

e $\dfrac{1234}{1432} \dots\dots \dfrac{1567}{891}$ $(< \ or \ > \ or \ =)$

f $\dfrac{13}{187} \dots\dots \dfrac{9}{9}$ $(< \ or \ > \ or \ =)$

g $\dfrac{6}{5} \dots\dots \dfrac{103}{196}$ $(< \ or \ > \ or \ =)$

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4 | Arrange each of the following in a descending order :

a $\frac{2}{7}$, $\frac{5}{7}$, $\frac{3}{7}$, $\frac{4}{7}$ .... , ... , ... , ...

b $\frac{2}{11}$, $\frac{7}{11}$, $\frac{4}{11}$, $\frac{10}{11}$ .... , ... , ... , ...

c $\frac{5}{9}$, 1 , $\frac{2}{9}$, $\frac{7}{9}$ .... , ... , ... , ...

d $\frac{2}{10}$, $\frac{9}{10}$, $\frac{14}{10}$, 0.5 , $\frac{7}{10}$ .... , ... , ... , ... , ...

e $\frac{12}{7}$, $\frac{12}{5}$, $\frac{12}{17}$, $\frac{12}{13}$, $\frac{12}{15}$ .... , ... , ... , ... , ...

f $8\frac{1}{7}$, $8\frac{3}{7}$, 9 , $8\frac{4}{7}$ .... , ... , ... , ... , ...

5 | Arrange each of the following in an ascending order :

a $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{3}$ .... , ... , ...

b $5\frac{1}{5}$, $4\frac{3}{4}$, $4\frac{5}{8}$, $5\frac{1}{2}$ .... , ... , ... , ...

c $\frac{5}{8}$, $\frac{5}{6}$, $\frac{3}{8}$ .... , ... , ...

d $5\frac{3}{8}$, $5\frac{3}{4}$, $6\frac{1}{2}$ .... , ... , ...

e $2\frac{2}{5}$, $2\frac{1}{3}$, $\frac{22}{9}$ .... , ... , ...

f $6\frac{2}{5}$, $4\frac{3}{4}$, $6\frac{5}{8}$, $4\frac{1}{2}$ .... , ... , ... , ...

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Add :

a $\frac{1}{3} + \frac{1}{4}$ = ...

b $\frac{1}{4} + \frac{1}{8}$ = ...

c $\frac{2}{3} + \frac{3}{4}$ = ...

d $\frac{7}{8} + \frac{5}{6}$ = ...

e $\frac{1}{4} + \frac{3}{10}$ = ...

Subtract :

a $\frac{1}{3} - \frac{1}{5}$ = ...

b $\frac{2}{5} - \frac{1}{10}$ = ...

c $\frac{5}{6} - \frac{1}{2}$ = ...

d $\frac{5}{6} - \frac{3}{8}$ = ...

e $\frac{2}{3} - \frac{1}{4}$ = ...

Choose the correct answer :

a $\frac{1}{4} + \frac{1}{5}$ = ... $\left(\frac{2}{9} \text{ or } \frac{9}{20} \text{ or } \frac{1}{20} \text{ or } \frac{2}{10}\right)$

b $\frac{1}{4} + \frac{2}{3}$ = ... $\left(\frac{11}{12} \text{ or } \frac{2}{12} \text{ or } \frac{3}{12} \text{ or } \frac{3}{7}\right)$

c $\frac{2}{7} + \frac{2}{5}$ = ... $\left(\frac{4}{35} \text{ or } \frac{4}{13} \text{ or } \frac{4}{12} \text{ or } \frac{24}{35}\right)$

d $\frac{2}{5} + \frac{3}{8}$ = ... $\left(\frac{5}{40} \text{ or } \frac{31}{40} \text{ or } \frac{6}{40} \text{ or } \frac{5}{13}\right)$

e $\frac{5}{9} + \frac{1}{3}$ = ... $\left(\frac{7}{9} \text{ or } \frac{6}{12} \text{ or } \frac{8}{9} \text{ or } \frac{5}{27}\right)$

f $\frac{6}{7} - \frac{1}{42}$ = ... $\left(\frac{5}{6} \text{ or } \frac{6}{5} \text{ or } 1\frac{1}{7} \text{ or } \frac{36}{42}\right)$

g $8 - \frac{2}{3}$ = ... $\left(\frac{6}{3} \text{ or } \frac{6}{5} \text{ or } 7\frac{2}{3} \text{ or } 7\frac{1}{3}\right)$

Find the result in the simplest form :

a $3\frac{1}{2} + 2\frac{1}{4}$

b $6\frac{1}{6} + 7\frac{1}{7}$

c $2\frac{5}{6} + \frac{8}{9}$

Find the result in the simplest form :

a $4\frac{2}{3} - 2\frac{1}{4}$

b $9\frac{3}{7} - 4\frac{1}{6}$

c $5 - 1\frac{1}{3}$

b $10\frac{1}{3} - 5\frac{1}{2}$

Find the result of each of the following in the simplest from :

a $\frac{1}{4} + \frac{2}{3} + \frac{1}{2}$

b $7\frac{1}{4} + \frac{1}{6} + 1\frac{1}{3}$

g $\left(7\frac{2}{5} + 4\frac{1}{6}\right) - \frac{32}{30}$

d $\left(3\frac{2}{5} + 1\frac{1}{3}\right) - \frac{15}{12}$

Ahmed has L.E. 10 bought a pen for L.E. $3\frac{1}{4}$ and notebook for L.E. $2\frac{1}{4}$ Find the remainder with Ahmed.

DECIMALS

Complete :

$$\frac{3}{10}$$ Is written as ………… Is read as ……………………………………………

$$\frac{5}{100}$$ Is written as ………… Is read as ……………………………………………

$$\frac{75}{100}$$ Is written as ………… Is read as ……………………………………………

$$\frac{5}{1000}$$ Is written as ………… Is read as ……………………………………………

$$\frac{54}{100}$$ Is written as ………… Is read as ……………………………………………

$$\frac{654}{1000}$$ Is written as ………… Is read as ……………………………………………

$$\frac{25}{1000}$$ Is written as ………… Is read as ……………………………………………

$$\frac{102}{1000}$$ Is written as ………… Is read as ……………………………………………

$$\frac{64}{10}$$ Is written as ………… Is read as ……………………………………………

$$\frac{654}{100}$$ Is written as ………… Is read as ……………………………………………

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$\dfrac{18}{10}$ Is written as   ....   Is read as ....

$\dfrac{128}{100}$ Is written as   ....   Is read as ....

$\dfrac{108}{10}$ Is written as   ....   Is read as ....

$1 \dfrac{8}{10}$ Is written as   ....   Is read as ....

$82 \dfrac{15}{100}$ Is written as   ....   Is read as ....

$28 \dfrac{36}{100}$ Is written as   ....   Is read as ....

$102 \dfrac{9}{10}$ Is written as   ....   Is read as ....

$25 \dfrac{11}{1000}$ Is written as   ....   Is read as ....

$38 \dfrac{257}{1000}$ Is written as   ....   Is read as ....

Write the following numbers using the decimal point :

1) seven tenths = ...   2) two hundredths = ...

3) three tenths = ...   4) sixteen hundredths = ...

5) nine thousandths = ...

6) fifteen thousandths = ...

7) twelve tenths = ...

8) forty five tenths = ...

8) twenty four hundredths = ...

9) nineteen thousandths = ...

10) three hundred fifty one hundredths = ...

11) five hundred sixty nine thousandths

12) four and seven tenths = ...

13) six and forty two hundredths= ....

14) twenty and three hundredths= ....

15) eighty five and sixty one thousandths = ...

16) three hundred sixty four hundredths = ...

17) fifty two and thirty one thousandths = ...

18) ninety one and one thousandths = ...

19) seventeen and forty four thousandths = ...

20) six hundred thirty five and nine tenths = ...

21) ten thousand , five hundred forty seven and one tenths

= ....

Write the following decimals in words :

1) 0.3 = ...

2) 0.1 = ...

3) 0.05 = ...

4) 0.08 = ...

5) 0.008 = ...

6) 0.003 = ...

7) 0.34 = ...

8) 0.047 = ...

9) 0.025 = ...

10) 0.238 = ...

11) 0.124 = ...

12) 2.5 = ...

13) 3.7 = ...

14) 32.8= ....

15) 45.4 = ...

16) 4.86 = ...

17) 3.01 = ...

18) 6.07 = ...

19) 42.08 = ...

20) 36.014 = ...

21) 32.009 = ...

22) 56.14 = ...

23) 23.124 = ...

....

Write the following numbers using the decimal point :

$\dfrac{6}{10}$ = ...

$\dfrac{1}{100}$ = ...

$\dfrac{2}{1000}$ = ...

$\dfrac{45}{100}$ = ...

$\dfrac{36}{1000}$ = ...

$\dfrac{258}{1000}$ = ...

$\dfrac{25}{10}$ = ...

$\dfrac{125}{10}$ = ...

$\dfrac{256}{100}$ = ...

$\dfrac{3}{4}$ = ...

$\dfrac{4}{5}$ = ...

$\dfrac{1}{2}$ = ...

$\dfrac{3}{20}$ = ...

$\dfrac{3}{8}$ = ...

$\dfrac{1}{40}$ = ...

$\dfrac{15}{4}$ = ...

$\dfrac{7}{2}$ = ...

$\dfrac{6}{5}$ = ...

$3\dfrac{5}{10}$ = ...

$8\dfrac{5}{100}$ = ...

$4\dfrac{72}{100}$ = ...

$6\dfrac{2}{1000}$ = ...

$5\dfrac{25}{1000}$ = ...

$6\dfrac{123}{1000}$ = ...

$12\dfrac{6}{100}$ = ...

$22\dfrac{6}{100}$ = ...

$60\dfrac{26}{1000}$ = ...

Put each of the following in the form of a fraction in its simplest form :

0.5 = ...

0.05 = ...

.008 = ...

0.02 = ...

0.25 = ...

0.025 = ...

0.125 = ...

1.6 = ...

2.75 = ...

3.08 = ...

2.005 = ...

9.375 = ...

65.5 = ...

23.02 = ...

10.01 = ...

Represent the following decimals on the number line :

2.1 , 0.3 , 0.7 , 2.6 , 1.4

```
|_____|_____|_____|
0                  1                  2                  3
```

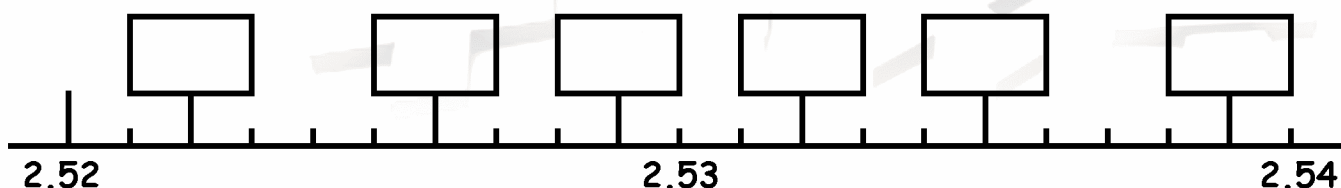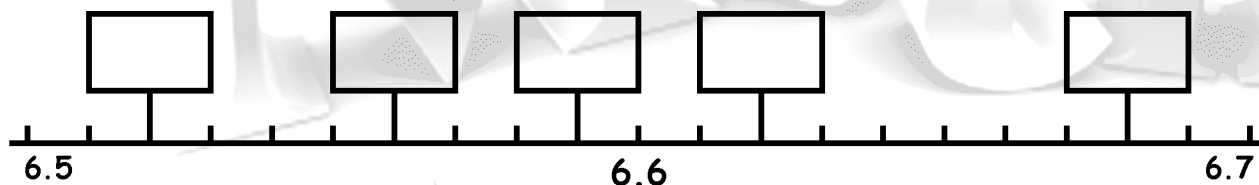5.2 , 5.8 , 6.3 , 6.8 , 7.5 , 7.7

```
|_____|_____|_____|
5                  6                  7                  8
```

0.71 , 0.73 , 0.79 , 0.75

```
|_____|
0.7                                              0.8
```
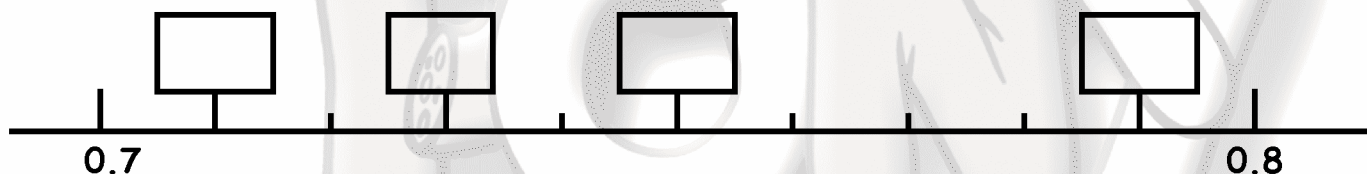
3.054 , 3.052 , 3.069 , 3.067

```
|_____|
3.05                                            3.06
```
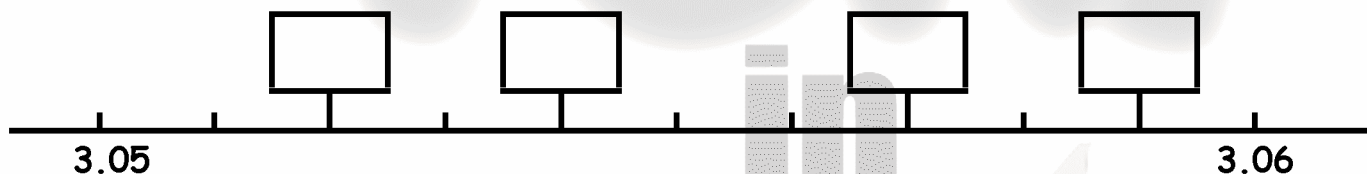
Write the suitable number inside the rectangle

```
|_____|
3                  4                              5
```

```
|_____|
6.5                6.6                           6.7
```

```
|_____|
2.52               2.53                          2.54
```

19

0.45   0.46   0.47

23.15   23.16

45.06   45.07
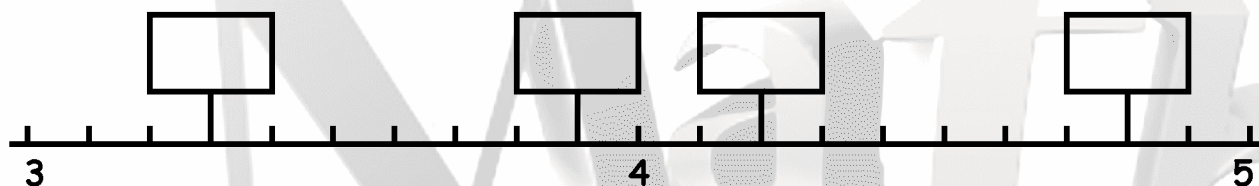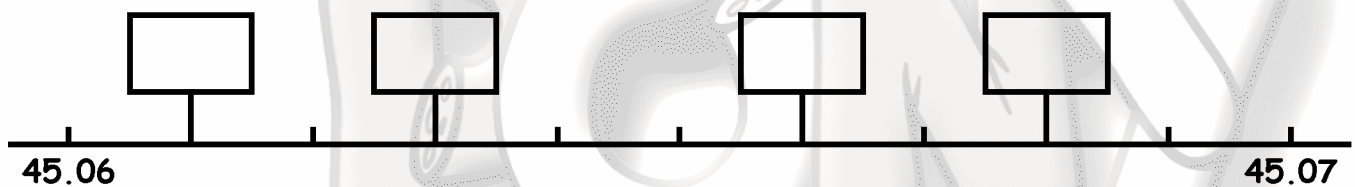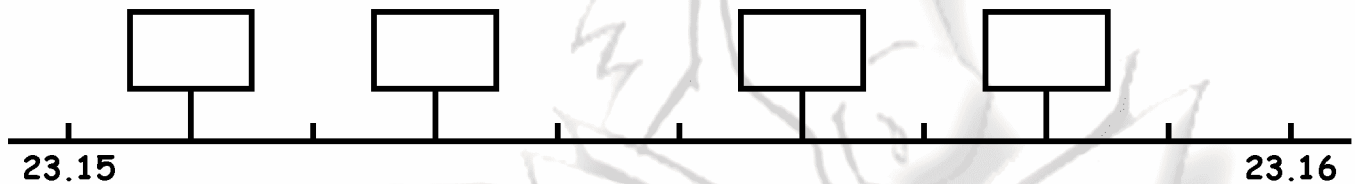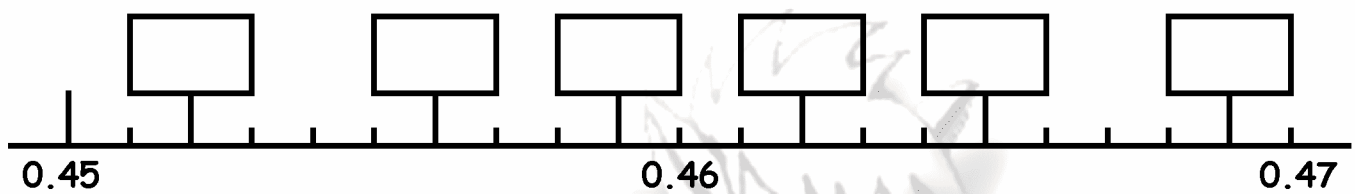
Write three numbers between :

5 and 6	2.5 and 2.6
……… , ……… , ………	……… , ……… , ………
12 and 13	13.8 and 13.9
……… , ……… , ………	……… , ……… , ………
36.18 and 36.19	0.85 and 0.86
……… , ……… , ………	……… , ……… , ………
1.215 and 1.216	8 and 8.1
……… , ……… , ………	……… , ……… , ………
1.25 and 1.26	0 and 0.1
……… , ……… , ………	……… , ……… , ………

Complete with an integer :

.... > 2.5 > .... > 8.04 > ....

.... > 0.92 > .... > 12.39 > ....

.... > 0.5 > .... > 251.3 > ....

.... > 4.02 > .... > 1.39 > ....

Complete as in the example : (3.15= 3 + 0.15)

3.8   = ... + ... = 4 + 0.3

42.5 = ... + ... = 82 + 0.83

0.35 = ... + ... = 0 + 0.01

2.524 = ... + ... = 142 + 0.8

0.35 = ... + ... = 0 + 0.102

Complete as in the example : (0.4 + 0.6 = 1)

0.3 + 0.7 = ...   0.25 + 0.75 = ...

0.1 + ... = 1   .... + 0.24 = 1

0.105 + 0.895 = ...   0.451 + 0.549 = ...

Complete as in the example : (53.15= 50 + 3 + 0.1 + 0.05)

3.5 = ...

31.8 = ...

6.58 = ...

45.123 = ...

5.023 = ...

41.23 = ...

.... = 500 + 40 + 2 + 0.3 + 0.08

.... = 60 + 2 + 0.05 + 0.009

.... = 30 + 5 + 0.7 + 0.07

.... = 900 + 20 + 0.7 + 0.008

.... = 50 + 2 + 0.8 + 0.1

Complete the table :

Number	thousandths	hundreds	tens	units	Decimal point	tenths	hundredths	thousandths	Ten thousandths
5 . 6					.				
6 . 1 2					.				
3 6 . 5					.				
2 5 . 7					.				
6 . 4 7					.				
3 . 8 9					.				
2 7 . 9 8					.				
9 8 . 4 2					.				
4 5 6 . 2					.				
9 3 7 . 1					.				
1 2 . 5 6 7					.				
6 3 . 1 2 7					.				
1 2 3 . 8					.				
9 7 1 . 2					.				
3 6 . 1 2 3					.				
3 . 5 8 9					.				

Circle the tenths digit :

3 6 . 8 5   –   7 8 . 2   –   6 3 6 . 4

1 . 1 2 4   –   0 . 0 2 4   –   8 6 4 . 2

8 8 . 6   –   9 7 8 . 2   –   9 . 6 8 7

Circle the tens digit :

6 5 . 7 8   –   9 8 7 . 2   –   1 6 . 1 4 7

5 6 4 4 . 2   –   1 0 2 . 6   –   1 3 . 7 5

3 3 . 5 4   –   2 5 . 1 1 5   –   9 9 3 6 . 5

Circle the hundredths digit :

3 6 . 8 5   -   3 . 1 5 6   -   9 9 . 1 2 3

0 . 5 4 6   -   9 8 6 . 0 5   -   6 0 . 0 0 1

0 . 0 1   -   7 . 1 2 3   -   0 . 0 0 6 7

write the place value of the digit 4 in each of the following :

0.247	4.158	23.425	45.56	0.024
....	....	....	....	....
8.451	6.247	36.214	4.2	2.4
....	....	....	....	....

write the value of the encircled digit in each of the following :

③6 . 8 5	7 8 . ②	⑥3 6 . 4	1 . 1 2 ④
....	....	....	....
8 6 ④ . 2	⑧8 . 6	9 7 ⑧ . 2	9 . 6 ⑧ 7
....	....	....	....
3 6 . 8 5	3 . 1 5 ⑥	9 9 . 1 ②3	⓪. 5 4 6
....	....	....	....
9 8 6 . 0 ⑤	6 0 . 0 0 ①	0 . 0 ①	⑦. 1 2 3
....	....	....	....

Put the suitable singe < , = or >

9.5	☐	4.8	23.5	☐	28.6
8.566	☐	10.2	653.22	☐	563.22
12.9	☐	12.4	9.28	☐	9.6
45.45	☐	45.54	$\frac{3}{4}$	☐	0.75
86.8	☐	86.685	91.5	☐	91.455
65.879	☐	65.91	$2\frac{1}{4}$	☐	2.5
12.98	☐	12.255	6.63	☐	16.3
78.9	☐	79.8	6	☐	5.07
56.65	☐	65.56	29.5	☐	29.15
$\frac{1}{2}$	☐	0.45	0.9	☐	0.76

Underline the numbers that are equal :

a)   18.04 , 18.40 , 18.040 , 18.44 , 1.840

b)   0.10 , 10.1 , 0.01 , 0.001 , 0.1

c) 5.73 , 5.703 , 5.730 , 5.073 , 50.73

From the following number Complete:
(1.3 , 3.2 , 10.04 , 3.12 , 3.215 , 1.12)

The numbers greater than 3 are : ……………………………………………………………

The numbers smaller than 3 are : ……………………………………………………………

The smallest number is : …………………………………………………………

The greatest number is : …………………………………………………………

The numbers between 1 and 3 are………………………………………………………

The numbers between 2 and 4 are ……………………………………………………

The numbers in an ascending order …………………………………………………………

From the following number Complete:

(5.6 , 6.3 , 4.9 , 5.19 , 6.45 , 4.27)

The numbers greater than 4 are : ....

The numbers smaller than 4 are : ....

The smallest number is : ....

The greatest number is : ....

The numbers between 3 and 5 are..

The numbers between 4 and 6 are ....

The numbers in an descending order ....

Arrange the following numbers:

4.35 , 9.75 , 3.54 , 5.79 , 7.59

ascendingly : .... , ... , ... , ... , ...

descendingly : .... , ... , ... , ... , ...

45.23 , 45.09 , 45.98 , 45.67 , 45.81

ascendingly : .... , ... , ... , ... , ...

descendingly : .... , ... , ... , ... , ...

3.4 , $3\frac{1}{2}$, 3.65 , 3.2 , 3.3

ascendingly : .... , ... , ... , ... , ...

descendingly : .... , ... , ... , ... , ...

6.75 , 6.08 , 6.125 , 6.8 , 6

ascendingly : .... , ... , ... , ... , ...

descendingly : .... , ... , ... , ... , ...

8.05 , 8.015 , 8.105 , 8.5 , 8

ascendingly : .... , ... , ... , ... , ...

descendingly : .... , ... , ... , ... , ...

Find :

3 5 . 5 6	7 8 5 . 5	9 8 . 3	6 4
+ 4 . 9	− 5 6 . 6 2	+ 1 . 7	− 8 . 2 2
....	....	....	....

7 8 . 1 2	9 5	1 2 . 1 1	1 5 . 5 5
+ 3 5 . 9	− 0 . 5 6 4	+ 7 . 8 9	− 8 . 8
....	....	....	....

17.3	+	4.6	=...................	5.7 − 1.4	=...................
15.8	+	10.9	=...................	9.25 − 3.82	=...................
2.65	+	9.3	=...................	12.78 − 3.5	=...................
8.25	+	11.75	=...................	89.65 − 54.9	=...................
1.007	+	9	=...................	0.6 − 0.275	=...................
78.02	+	54	=...................	1.9 − 1.258	=...................
13	+	2.65	=...................	13 − 2.65	=...................
25	+	6.22	=...................	25 − 6.22	=...................

28.65 + 17.3 + 2.05 =...................

12.36 + 20.3 + 3.001 =...................

0.125 + 1.25 + 12.5 =...................

(24.235 + 0.065) − (17 + 1.3) =...................

(28.25 + 11.75) − (2.5 + 3.2) =...................

(15.24 − 0.55) + (56 − 0.56) =...................

Put the suitable sign < ,   =   or   >:

7.9	+	2.3	☐	11.7	−	1.3
5.5	+	9.8	☐	56.1	−	3.5
58.003	−	57.03	☐	1	+	0.973
45.03	−	36.08	☐	56	−	43.5
99.89	−	90.9	☐	10	−	1.01
56.12	−	45.2	☐	78.22	−	67.3
520.46	+	0.73	☐	520	+	1.19
65.23	+	25.36	☐	75.14	+	15.45

Complete :

```
    8  3 . 5  7              9  7 . 4  8
  -☐ ☐ . 7  3  4          +  4  3 . ☐ ☐
  ─────────────           ──────────────
    2  4 .☐ ☐ ☐          ☐ ☐ ☐ . 9  3
```

```
    5  6 . 1  3 ☐           4  5 ☐ .☐  2
  -☐ ☐ . 5  8  3          +☐ ☐  5 . 3  6
  ─────────────           ──────────────
    2  9 .☐ ☐ 4            9  1  4 . 5 ☐
```

……………… + 47.85 = 100	33.3 − ……………… = 12.008
45.36 + ………… = 93	………… − 56.36 = 45.64
……………… + 23.6 = 36.7	70 − ………… = 36.36

Divide :

15	÷	10	=	....	28	÷	10	=	....
78	÷	10	=	....	15	÷	10	=	....
45	÷	100	=	....	36	÷	100	=	....
78	÷	100	=	....	72	÷	100	=	....
125	÷	100	=	....	6	÷	1000	=	....
347	÷	100	=	....	3	÷	1000	=	....
5	÷	10	=	....	365	÷	1000	=	....
6	÷	10	=	....	802	÷	1000	=	....

Hala had LE 35 , she bought a ball for 9.75 pounds , and a book for 840 piastres . find the remaining money with her .

....

....

....

Samy had LE 86 , she bought a ball for 54.3 pounds , and a book for 840 piastres . find the remaining money with her .

....

....

....

Mona has LE 200 , Can she buy a shoes for LE 99.8 , a bag for LE 45.75 and a dress for LE 70.25 .

....

....

....

If Hossam has 425 piastres and Hoda has 980 piastres . find the difference between their money in pounds

....

Unit 2

Approximation

Approximate each of the following to the nearest 10

524 ~	525 ~	526 ~ ....
78 ~	56 ~	84 ~ ....
7508 ~	6347 ~	6522 ~ ....
24.65 ~	999.4 ~	35 ½ ~ ....
63.57 ~	899.6 ~	754 ¼ ~ ....

Approximate each of the following to the nearest 100

537 ~	558 ~	573 ~ ....
1234 ~	6547 ~	4567 ~ ....
600 ~	50 ~	401 ~ ....
54.65 ~	999.4 ~	95 ½ ~ ....
763.55 ~	987.6 ~	69 ¼ ~ ....

Approximate each of the following to the nearest 1000

6237 ~	6558 ~	6873 ~ ....
500 ~	634 ~	254 ~ ....
8799 ~	9866 ~	9500 ~ ....
274.65 ~	9999.4 ~	695 ½ ~ ....
693.5 ~	9787.3 ~	896 ¼ ~ ....

Approximate each of the following to the nearest 10 000

5 000 ~	8 400 ~	2 600 ~ ....
78 000 ~	36 005 ~	90 000 ~ ....
456 450 ~	659 558 ~	69 224 ~ ....
45 274.65 ~	99 999.4 ~	88 695 ½ ~ ....

Approximate each of the following to the nearest 100 000

50 000	~	64 400	~	2 600	~ ....
878 000	~	936 005	~	990 000	~ ....
456 450	~	659 558	~	469 224	~ ....
645 274.65	~	99 999.4	~	988 695 ½	~ ....

Approximate each of the following to the nearest 1000

315	~	To the nearest Ten	85	~	To the nearest Ten
789	~	To the nearest 100	569	~	To the nearest 100
3156.3	~	To the nearest 1000	1444.3	~	To the nearest 1000
31586	~	To the nearest 10 000	34006	~	To the nearest 10 000
8658200	~	To the nearest Million	8 458 050	~	To the nearest Million
736 ½	~	To the nearest ten	74 ½	~	To the nearest ten
99999	~	To the nearest 100 000	999 999	~	To the nearest 100 000

Complete the following table :

The number	Approximated to the nearest :				
	ten	Hundred	thousand	Ten thousands	Hundred thousands
4 525 064					
8 226 844					
7 005 050					
10 210 654					
99 999					
94 993					

determine the position of each number on the number line then complete

| | | | | | | | | | |
|30| | | | middle | | | | |40|

34 ~ …………… to the nearest 10

| | | | | | | | | | |
|480| | | | middle | | | | |490|
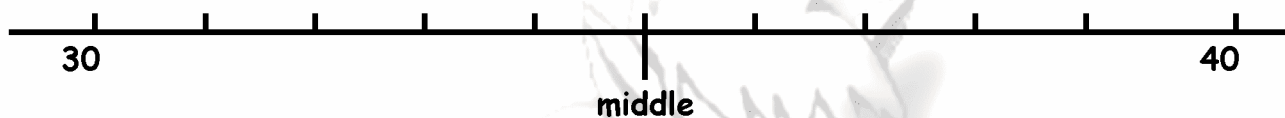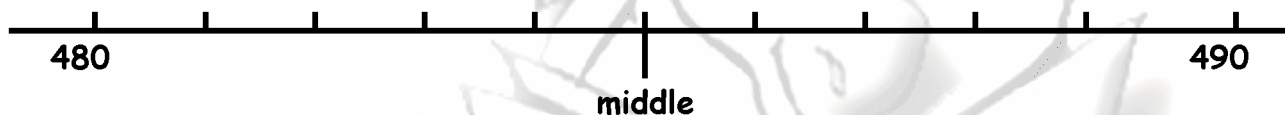
488 ~ …………… to the nearest 10

| | | | | | | | | | |
|8400| | | | middle | | | | |8500|

8461 ~ …………… to the nearest 100

| | | | | | | | | | |
|0| | | | middle | | | | |1000|
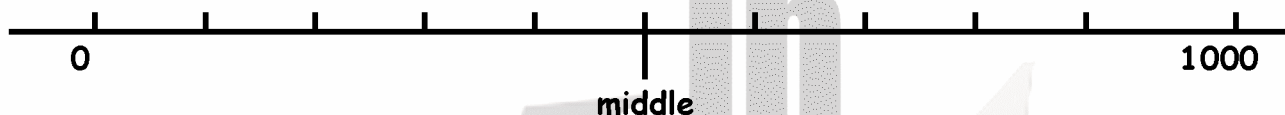
488 ~ …………… to the nearest 1000

| | | | | | | | | | |
|54 000| | | | middle | | | | |55 000|

54 150 ~ …………… to the nearest 10 000

| | | | | | | | | | |
|600 000| | | | middle | | | | |700 000|
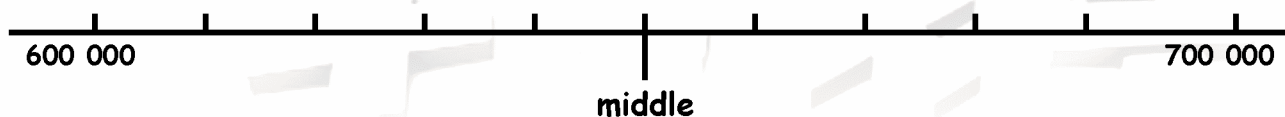
635 227 ~ …………… to the nearest 100 000

write all whole numbers which when we approximated each of them to the nearest 10 we obtain 560:

………………… ~ 560	………………… ~ 560	………………… ~ 560
………………… ~ 560	………………… ~ 560	
………………… ~ 560	………………… ~ 560	………………… ~ 560
………………… ~ 560	………………… ~ 560	

write 10 whole numbers which when we approximated each of them to the nearest 100 we obtain 600:

……………… ~ 600	……………… ~ 600	……………… ~ 600
……………… ~ 600	……………… ~ 600	
……………… ~ 600	……………… ~ 600	……………… ~ 600
……………… ~ 600	……………… ~ 600	

write 10 whole numbers which when we approximated each of them to the nearest 1000 we obtain 26 000:

…………… ~ 26 000	…………… ~ 26 000	…………… ~ 26 000
…………… ~ 26 000	…………… ~ 26 000	
…………… ~ 26 000	…………… ~ 26 000	…………… ~ 26 000
…………… ~ 26 000	…………… ~ 26 000	

write 10 whole numbers which when we approximated each of them to the nearest 10 000 we obtain 120 000:

…………… ~ 120 000	…………… ~ 120 000	…………… ~ 120 000
…………… ~ 120 000	…………… ~ 120 000	
…………… ~ 120 000	…………… ~ 120 000	…………… ~ 120 000
…………… ~ 120 000	…………… ~ 120 000	

Complete : The greatest whole number that if approximated to:

a)   _the nearest ten gives :_
50 is ………………….   470 is……………….   1200 is …………

b)   _the nearest 100 gives :_
400 is ………………   4100 is……………….   41 300 is …………

c)   _the nearest 1000 gives :_
5000 is ………………   45000 is……………….   47 000 is …………

d)   _the nearest 10 000_
70 000 is ……………   410 000 is…………   400 000 is …………

e)   _the nearest 100 000_
800 000 is …………   4 210 000 is…………   5 000 000 is ………

Complete : The smallest whole number that if approximated to:

a)   _the nearest ten gives :_
50 is ………………….   470 is……………….   1200 is …………

b)   _the nearest 100 gives :_
400 is ……………   4100 is……………….   41 300 is …………

c)   _the nearest 1 000_
5000 is ……………   45000 is……………….   47 000 is …………

d)   _the nearest 10 000_
70 000 is ……………   410 000 is…………   400 000 is …………

e)   _the nearest 100 000_
800 000 is …………   4 210 000 is…………   5 000 000 is ………

Complete with suitable numbers :

1)   7 3 ☐ 5   ~   7 ☐ 4 ☐   To the nearest 10

2)   7 6 ☐ 4 3 5 ~ 7 7 ☐ ☐ ☐ ☐   To the nearest 10 000

3)   6 0 ☐ 9 ☐ .54 ~ ☐ ☐ 1 ☐ ☐   To the nearest 100

4) 9 ☐ 7 ☐ ~ ☐ 8 7 ☐   To the nearest 10

5) ☐ 7 ☐ 9 0 0 ☐ ~ 9 7 ☐ ☐ ☐ ☐   To the nearest 100 000

Curry out the following then approximate :
a) 45 056 + 54 953 = ……………………….   To the nearest 10 000
b) 456.55 + 55.6   = ……………………….   To the nearest 10
c) 80 000 – 5 465 = ……………………….   To the nearest 100
d) 600 – 45.55   = ……………………….   To the nearest 1000

Complete with a suitable number:
a) The number 720 is an approximation for the number…… to the nearest10

b) The number 3500 is an approximation for the number…… to the nearest

hundred.

c) 7600 is an approximation for the number…… to the nearest ten.

d) 28000 is an approximation for the number…….. to the nearest 100.

e) 672000 is an approximation for the number……. to the nearest thousand.

 Choose the correct answer:
a) the number 17085 = 17000 to the nearest………….

(10 , 100 , 1000 . 100000)

b) the number 8453 ~ 8500 to the nearest………….

(10 , 100 , 1000 , 100000)

c) the number 75643.1 ~ 75600 to the nearest………….

(10 , 100 , 1000 , 10000)

d) the number 3725.6 ~ 3730 to the nearest………….

(10 , 100 , 1000 , 10000)

Approximate each of the following to the nearest unit

0.5 ~ ....   0.9 ~ ....   1.4 ~ ....

8.49 ~ ....   35.449 ~ ....   127.3 ~ ....

17.6 ~ ....   3.56 ~ ....   124.8 ~ ....

45.8 ~ .... $15 \frac{1}{4}$ ~ .... $34 \frac{3}{4}$ ~ ....

4.65 ~ ....   9.8 ~ .... $35 \frac{1}{2}$ ~ ....

17.9 ~ ....   12.73 ~ ....   259.2 ~ ....

$\frac{5}{8}$ ~ .... $9 \frac{3}{8}$ ~ ....   0.598 ~ ....

1.3 ~ ....   8.9 ~ ....   9.6 ~ ....

Complete the following table :

The number	Approximated to the nearest :			
	unit	ten	Hundred	thousand
4 525.064				
8 226.844				
7 005.050				
10 210.654				
99 999.8				
94 99.3				
525 ½				
8 226. 4				
7 005 $\frac{5}{8}$				
10 210.654				

Approximate each of the following :

565 249. 45 ~ ....   To the nearest   unit

565 249. 45 ~ ....   To the nearest   Ten

565 249. 45 ~ ....   To the nearest   100

565 249. 45 ~ ....   To the nearest   1000

565 249. 45 ~ ....   To the nearest   10 000

565 249. 45 ~ ....   To the nearest   100 000

565 249. 45 ~ ....   To the nearest   1 000 000

8 095 469.73 ~ ....   To the nearest   unit

8 095 469.73 ~ ....   To the nearest   Ten

8 095 469.73 ~ ....   To the nearest   100

8 095 469.73 ~ ....   To the nearest   1000

8 095 469.73 ~ ....   To the nearest   10 000

8 095 469.73 ~ ....   To the nearest   100 000

8 095 469.73 ~ ....   To the nearest   1 000 000

$649 \frac{3}{4}$ ~ ....   To the nearest   unit

$649 \frac{3}{4}$ ~ ....   To the nearest   Ten

$649 \frac{3}{4}$ ~ ....   To the nearest   100

$649 \frac{3}{4}$ ~ ....   To the nearest   1000

$649 \frac{3}{4}$ ~ ....   To the nearest   1000

Determine the position of each number on the number line then complete
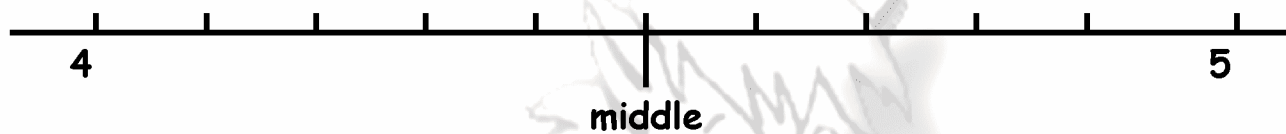
4   middle   5

4.6 ~ …………… to the nearest unit

8   middle   9

8.46 ~ …………… to the nearest whole number
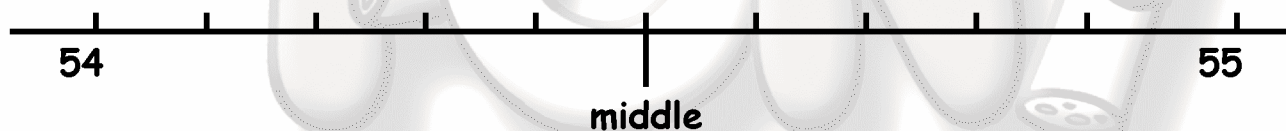
54   middle   55

54.6 ~ …………… to the nearest unit

258   middle   259

258.499 ~ …………… to the nearest whole number

25   middle   26
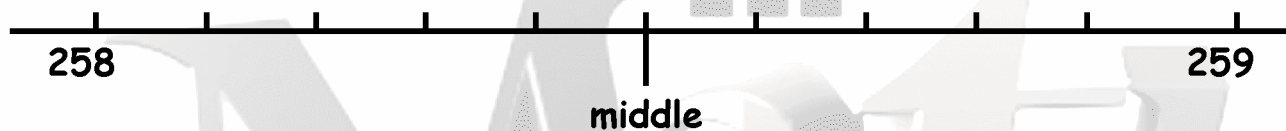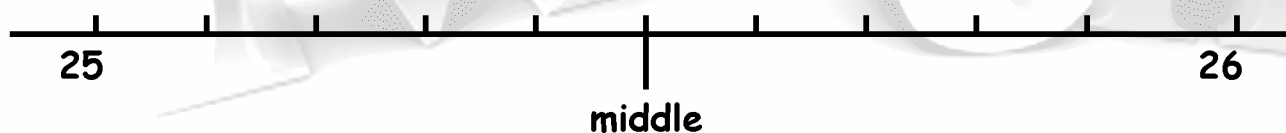
25.099 ~ …………… to the nearest whole number

Approximate each of the following to the nearest tenth

0.54 ~ ....   0.95 ~ ....   0.48 ~ ....

8.49 ~ ....   35.449 ~ ....   127.43 ~ ....

17.96 ~ ....   3.516 ~ ....   124.48 ~ ....

5.48 ~ ....   15 $\frac{1}{4}$ ~ ....   34 $\frac{3}{4}$ ~ ....

4.65 ~ ....   9.98 ~ ....   0.999 ~ ....

17.09 ~ ....   12.0 ~ ....   259.28 ~ ....

$\frac{5}{8}$ ~ ....   9 $\frac{3}{8}$ ~ ....   0.598 ~ ....

1.33 ~ ....   8.95 ~ ....   9.64 ~ ....

Complete the following table :

The number	Approximated to the nearest :				
	0.1	unit	10	100	1000
4 525.064					
8 226.844					
7 005.050					
10 210.654					
99 999.85					
94 99.96					
525 $\frac{3}{4}$					
68 226.94					
7 005 $\frac{5}{8}$					
10 210.654					

39

Approximate each of the following :

565 249. 45 ~ ....   To the nearest tenth

565 249. 45 ~ ....   To the nearest unit

565 249. 45 ~ ....   To the nearest Ten

565 249. 45 ~ ....   To the nearest 100

565 249. 45 ~ ....   To the nearest 1000

565 249. 45 ~ ....   To the nearest 10 000

565 249. 45 ~ ....   To the nearest 100 000

565 249. 45 ~ ....   To the nearest 1 000 000

8 095 469.73 ~ ....   To the nearest 0.1

8 095 469.73 ~ ....   To the nearest unit

8 095 469.73 ~ ....   To the nearest 10

8 095 469.73 ~ ....   To the nearest 100

8 095 469.73 ~ ....   To the nearest 1000

8 095 469.73 ~ ....   To the nearest 10 000

8 095 469.73 ~ ....   To the nearest 100 000

8 095 469.73 ~ ....   To the nearest 1 000 000

649 $\frac{3}{4}$ ~ ....   To the nearest One decimal place

649 $\frac{3}{4}$ ~ ....   To the nearest unit

649 $\frac{3}{4}$ ~ ....   To the nearest 10

649 $\frac{3}{4}$ ~ ....   To the nearest 100

Determine the position of each number on the number line then complete

| 4.6 | | | | | | middle | | | | | | 4.7 |
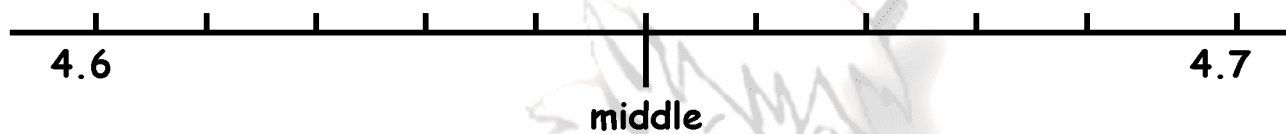
4.66 ~ …………… to the nearest unit

| 8.4 | | | | | | middle | | | | | | 8.5 |
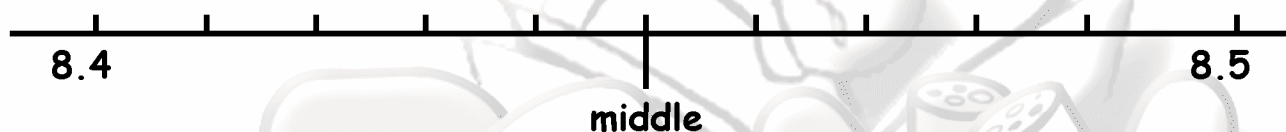
8.44 ~ …………… to the nearest whole number
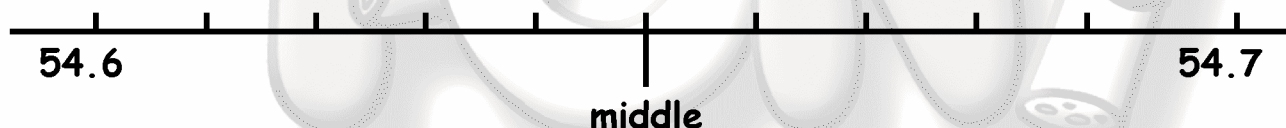
| 54.6 | | | | | | middle | | | | | | 54.7 |

54.609 ~ …………… to the nearest unit

| 258.5 | | | | | | middle | | | | | | 258.6 |

258.499 ~ …………… to the nearest whole number

| 25 | | | | | | middle | | | | | | 26.1 |
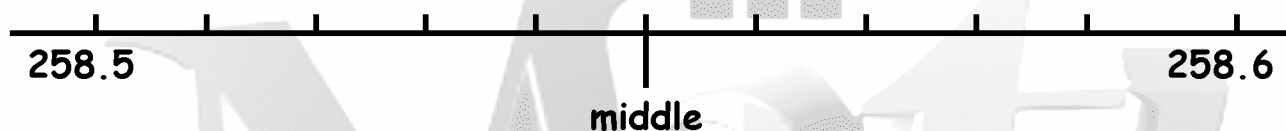
25.099 ~ …………… to the nearest whole number

Unit 3

geometry

Congruency
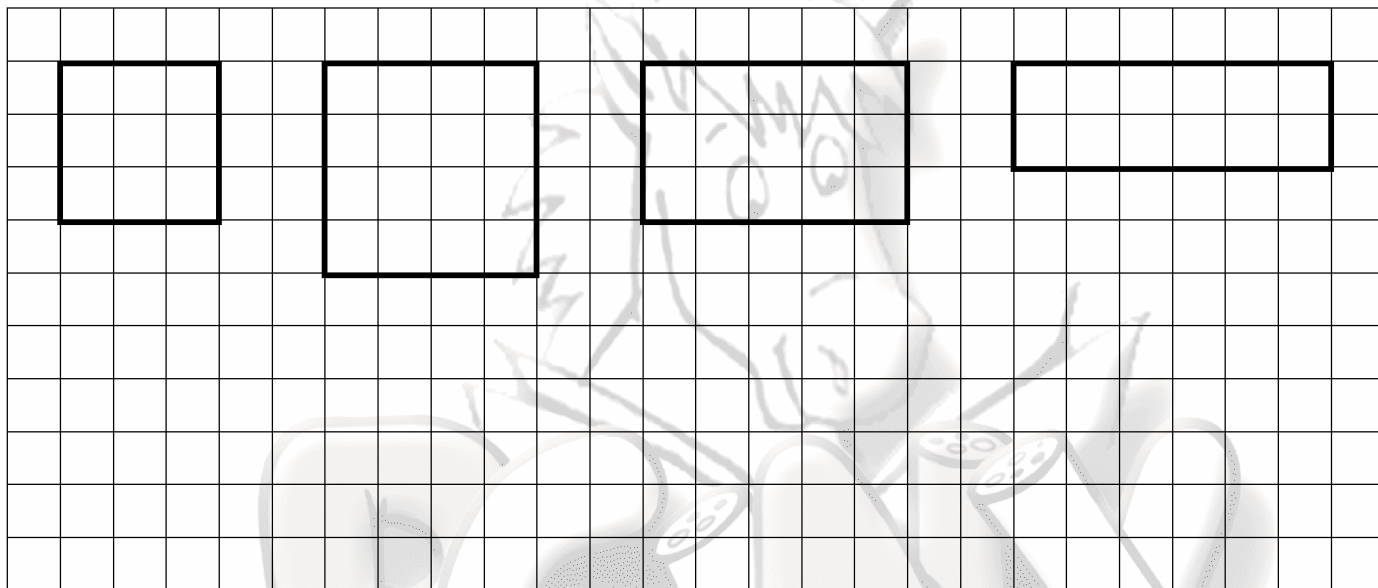
Draw the square EFGH ≡ the square ABCD
Draw the square MNOP ≡ the square IJKL
Draw the rectangle XYZS ≡ the rectangle KLMN
Draw the rectangle QRST ≡ the rectangle IJPO

Draw a congruent figure
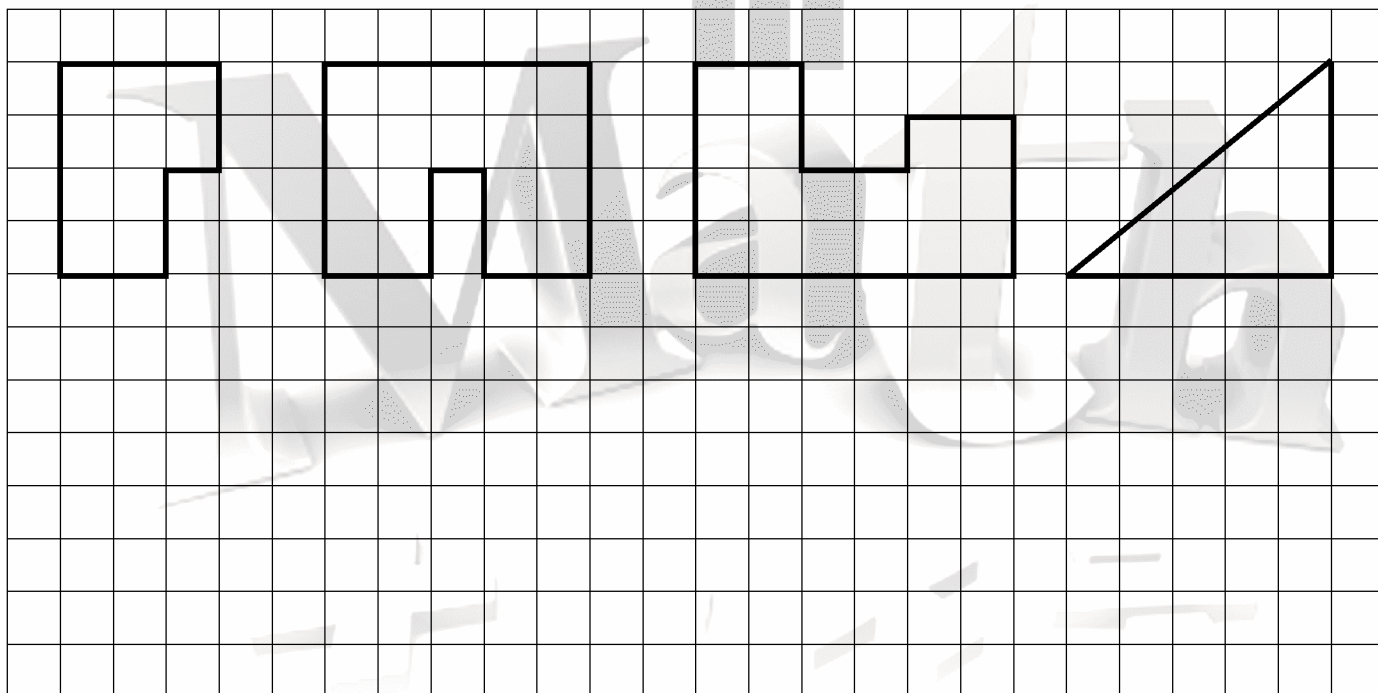
Draw a line in the following figure to get congruent figure if possible
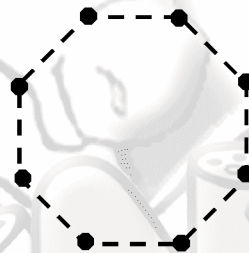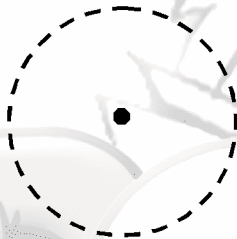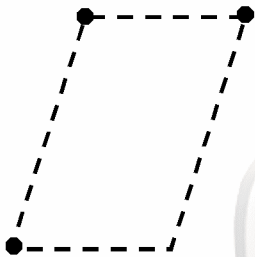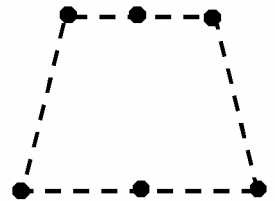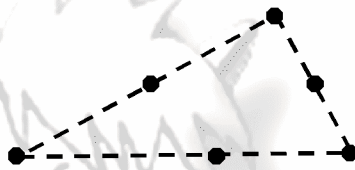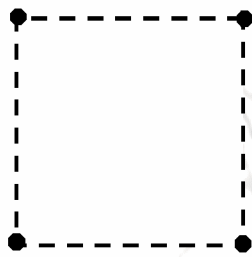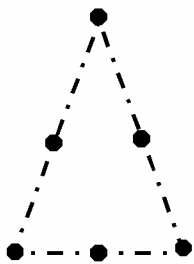
Join each figure to its congruent figure :
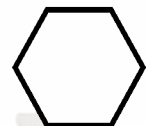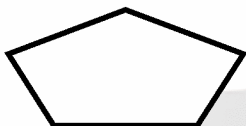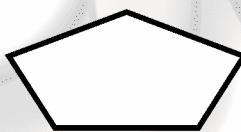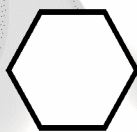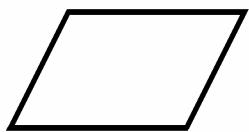
Join each figure to its congruent figure :
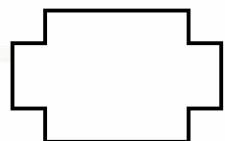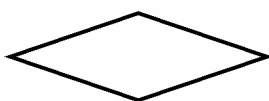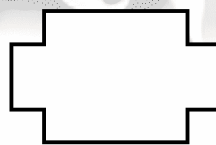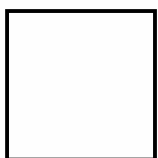
Symmetrical figures
And lines of symmetry

Complete :

a) The rectangle has ……… lines of symmetry.

b) The square has ……… lines of symmetry.

c) The rhombus has ……… lines of symmetry.

d) The circle has ……… lines of symmetry.

e) The isosceles triangle ……… lines of symmetry.

f) The diagonals in the rectangle divides it into two ………… triangles , but it is not a line of …………… for it.

g) The isosceles trapezium has ……………….. line of symmetry.

h) The parallelogram has ……………….. lines of symmetry.

i) The trapezium has ……………….. lines of symmetry.

Put (/) or (X)

a) The parallelogram has four lines of symmetry   (   )

b) The rectangle has four lines of symmetry   (   )

c) The scalene triangle has three lines of symmetry   (   )

d) The isosceles trapezium has one line of symmetry   (   )

e) The square has four lines of symmetry   (   )

f) The rhombus has three lines of symmetry   (   )

g) The line of symmetry of a figure is that line dividing it into two

congruent parts   (   )

h) The chord of the circle is a line of symmetry of it   (   )

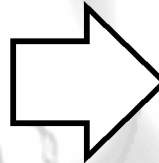## Write the number of lines of symmetry .

....

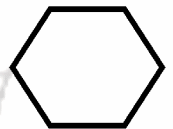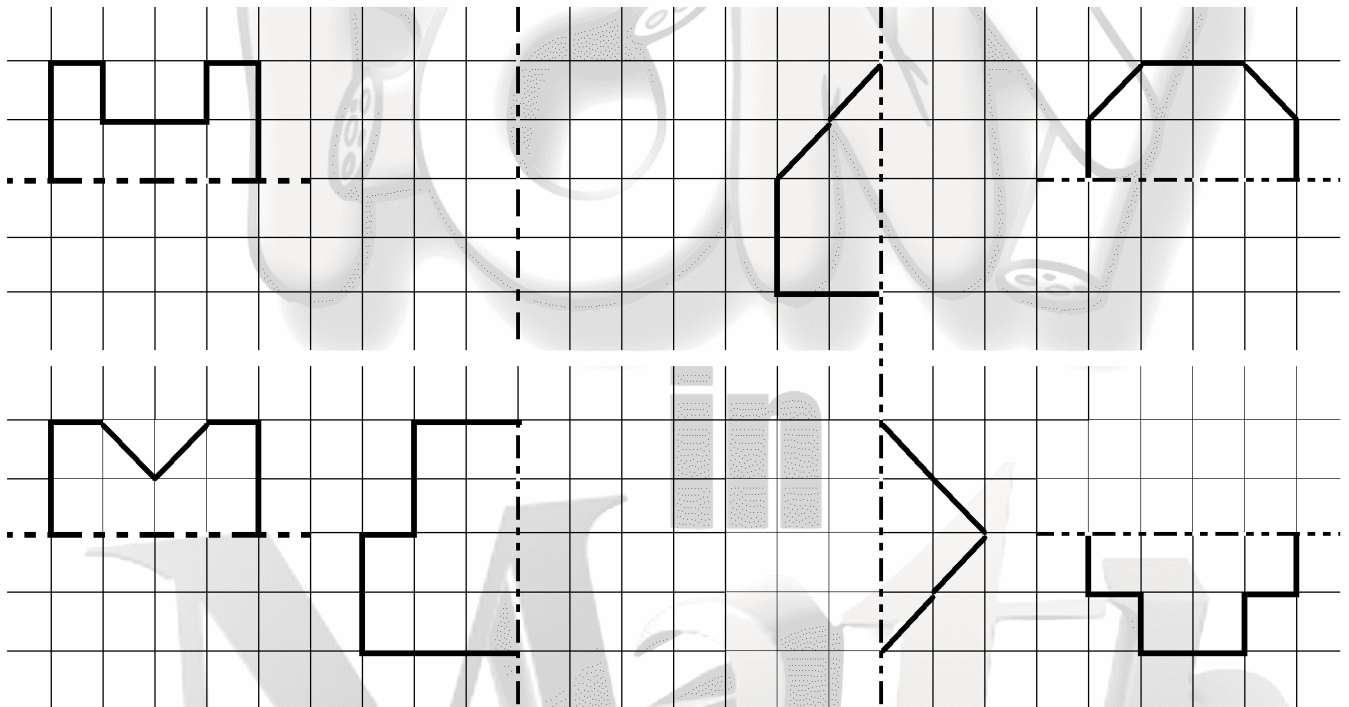.........   ....
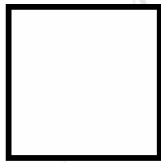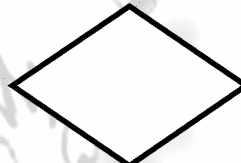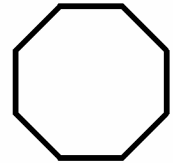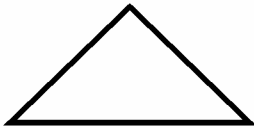
Complete the following symmetrical shapes .

The opposite figure represent a circle M
ABCD is a square with mid-points of its sides
X, Y, Z and N. Notice the figure,
then answer the following questions.

a) Draw a common line of symmetry for the
   three figures (the two squares and the circle)

b) How many common lines of symmetry are
   there for the three figures?…………………….

c) How many common lines of symmetry are
   there for the two squares?…………………………

46
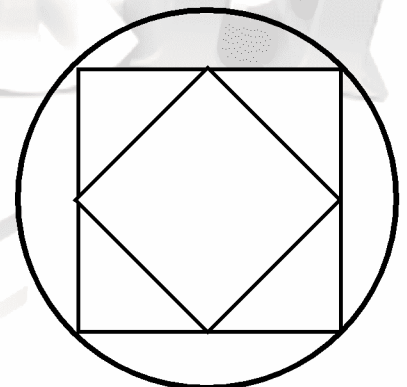
Visual pattern

Discover the pattern , then complete :

A B C A B C A B C   ....

A B C A B C A B C   ....

+ + − + + − + + −   ....

▲ ▼ ▲ ▼ ▲ ▼   ....

○ □ △ ○ □ △   ....

⬡ ⬡ ⬡ ⬡ ⬡ ⬡   ....

AB   ABB   ABBB   ABBBB   ....

100 , 90 , 80 , ... , ... , ... , ...

13.2 , 13.4 , 13.6 , ... , ... , ... , ...

○□ ○□○ ....

△ △○ △△○ ....

� pattern ....

□◇□◇□ ....

10 , 9.6 , 9.2 , ... , ... , ... , ...
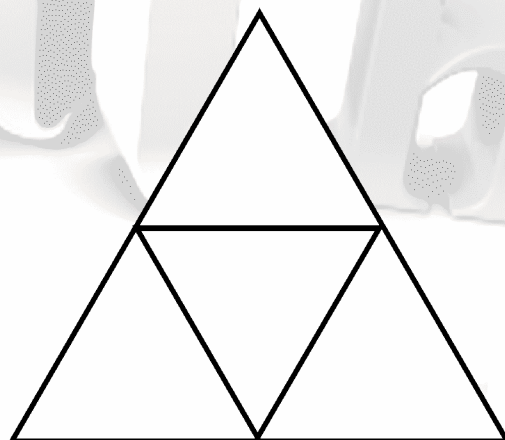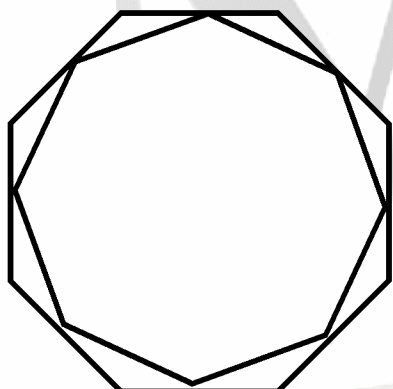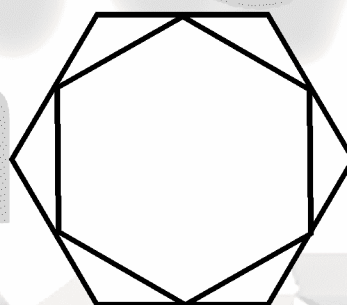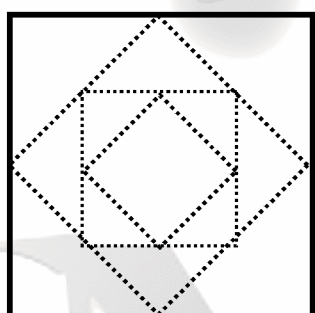
Unit 4

Measurement

The Capacity

Complete :

1 litres = ……… Millilitres

1.5 litres = ……… Millilitres

3.8 litres = ……… Millilitres

2.75 litres = ……… Millilitres

½ litres = ……… Millilitres

¼ litres = ……… Millilitres

¾ litres = ……… Millilitres

1 dm³ = ……… cm³

¼ dm³ = ……… cm³

¾ dm³ = ……… cm³

1.2 dm³ = ……… cm³

½ litres = ……… cm³

5 litres = ……… cm³

3.5 litres = ……… cm³

1 dm³ = ……… Millilitres

¼ dm³ = ……… Millilitres

7 000 Millilitres = …… Litres

24000 Millilitres = …… Litres

6 000 Millilitres = …… Litres

2 300 Millilitres = …… Litres

500 Millilitres = …… Litres

250 Millilitres = …… Litres

750 Millilitres = …… Litres

2 000 cm³ = ……… dm³

5 000 cm³ = ……… dm³

6 300 cm³ = ……… dm³

10 000 cm³ = ……… dm³

500 Millilitres = …… dm³

250 Millilitres = …… dm³

750 Millilitres = …… Litres

2 000 cm³ = ……… Litres

5 000 cm³ = ……… Litres

Put the suitable sign (< , = or >) :

$\frac{1}{4}$ litres	☐	245 Millilitres	2.75 litres	☐	2750 Millilitres
750 cm³	☐	$\frac{3}{4}$ litre	7500 cm³	☐	$\frac{3}{4}$ litre
3.5 litres	☐	3500 cm³	35 litres	☐	3500 cm³
5 000 cm³	☐	$\frac{1}{2}$ litre	5 000 cm³	☐	5 litre
750 Millilitres	☐	$\frac{3}{4}$ Litres	3000 Millilitres	☐	30 litres
5 dm³	☐	5 litre	5 00 cm³	☐	5 litre
5 000 cm³	☐	$\frac{1}{2}$ litre	5 000 cm³	☐	5 litre
1.500 litres	☐	150 Millilitres	500 Millilitres	☐	$\frac{1}{4}$ litre
15 litres	☐	1500 Millilitres	50 Millilitres	☐	$\frac{1}{4}$ litre

Choose the correct answer :

1) The capacity of a glass of water =...........

(3 litres , 25 Millilitres , 250 Millilitres)

2) Eman bought a bottle of medicine of capacity ....

(1/5 litre , 2 litres , 1000 millilitres)

3) We have a water tank of capacity ....

(200 mL , 50 L , 3000 mL)

4) The average water consumption for a person is ....

(15 litres , 21 500 Millilitres , 31 500 Millilitres)

5) the amount of milk used by a family of four persons is ....

(500 litres , 50 litres , 2000 millilitres)

Arrange the following quantities in an ascending order :

8.75 litres , 9000 mL , 5 litres , 6500 millilitres

.... , ... , ... , ...

The weight

Complete :

20 kg = ………………………………………..…..………… gm

7.5 kg = ……………………………………………..…..…… gm

¾ kg = ……………………………………..…..………… gm

43 kg = …………………………………………..…..……… gm

2.25 kg = …………………………………………………..……… gm

½ kg = ………………………………………..…..………… gm

500 gm = ………………………………………………………kg

7 000 gm = ……………………………………………..…… Kg

20 gm = …………………………………..…..……………… Kg

250 gm = …………………………………………………………kg

9 000 gm = ………………………………………………….…… Kg

55 gm = ……………………………………..…..…………… Kg

30 ton = ……………………………………………..….…… kg

8.3 ton = ……………………………………………..…..…… kg

¾ ton = …………………………………………..…..…… kg

30 ton = ……………………………………………..…..…… kg

0.3 ton = …………………………………………..…..…… kg

¼ ton = ………………………………………..…..………… kg

300 kg = ………………………………………….…..………ton

45 000 kg = …………………………………………..……..…… Ton

300 kg = …………………………………………..…..………… Ton

Workers put boxes in ship that hold about 12 tons each. The workers filled 115 boxes about **how many** tons of boxes did they put in the ship?

....
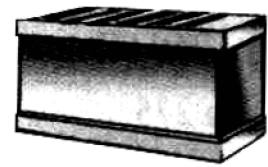
Yosry bought a bottle of jam and a packet of tea. If their weights were $1\frac{1}{2}$ kg and 750 gm. **What** is the total weight in grams?

....

The small T.V set weighs 5 kg, 400 gm and the weight of the radio cassette is 2600 gm. **Find** the difference between their weights

....
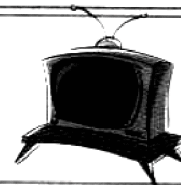
Lobna's dog weighs 7.2 kgm, Mai's cat weighs 1 kg and 700 gm. **What** is the difference between their weights?

....

The price of 1 kgm of meat is L.E 35. A family eats one and a half kilogram of meat every week. **How much** money does this family pay for meat in a month?

....

....

53

A man bought a golden armament for his wife. If the present weighs 40 gm and the price for one gram of gold is L.E 170, **how much** money did the man pay?

....

18 A man bought 8 tons of iron for building his familys house. If the price of 1 kilogram of iron is L.E 4.5, find:

a The price of one ton of iron   **b** The money paid for the iron he bought

....

....

19 A family of 7 persons eat monthly 5 kilograms of bananas, 2 kilograms of apples and 6 kilograms of oranges. The price for one kgm as show are L.E 3 for oranges, L.E 8 for apples, L.E 4 for bananas and L.E 2 for guavas

a How much money does this family pay for fruits?

b If the family wants to pay less money, but get the same amount of fruits, what will they do?

....

....

....

....

....

....

....

....
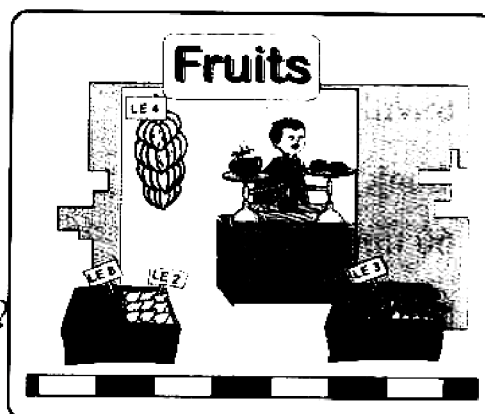
The Time

Complete :

1 day = ... hours

2 day = ... hours

1 hour = ... day

2 hour = ... day

1 hour = ... minutes

2 hour = ... minutes

1 minute = ... hours

2 minute = ... hours

1 minutes = ... seconds

2 minutes = ... seconds

1 second = ... minutes

2 second = ... minutes

1 day = ... hour = ... X ...... = ... minutes

2 day = ... hour = ... X ...... = ... minutes

1 hour = ... minutes = ... X ...... = ... seconds

2 hour = ... minutes = ... X ...... = ... seconds

1 day = ... minutes = ... X ...... = ... seconds

2 day = ... minutes = ... X ...... = ... seconds

Arrange ascendingly

$\frac{2}{3}$ Of a day   ,   18 hours   ,   1020 minutes

.... , ... , ...

Arrange descendingly

$\frac{1}{4}$ Of a day   ,   10 hours   ,   920 minutes

.... , ... , ...
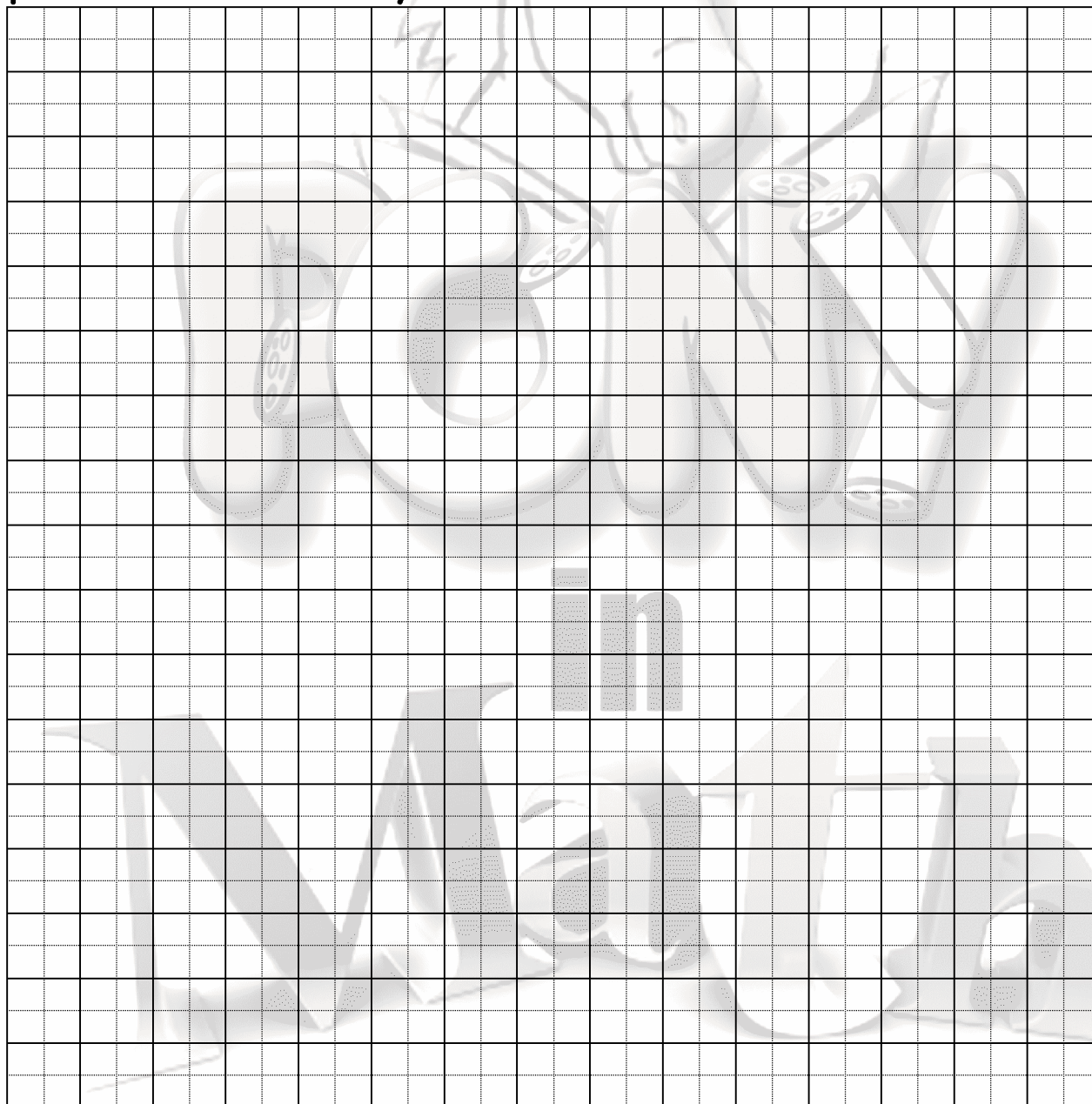
Unit 5

Statistics
And
Probability

Collecting , displaying
and representing data

The table below represent the number of students taking part in the activities from primary three and four:

Activity	Cultural	Arts	Sports	Others
Primary 3	25	15	20	25
Primary 4	10	40	50	25

Represent these data by double bars .

The table below represent the temperature in the morning and at noon during 5 days

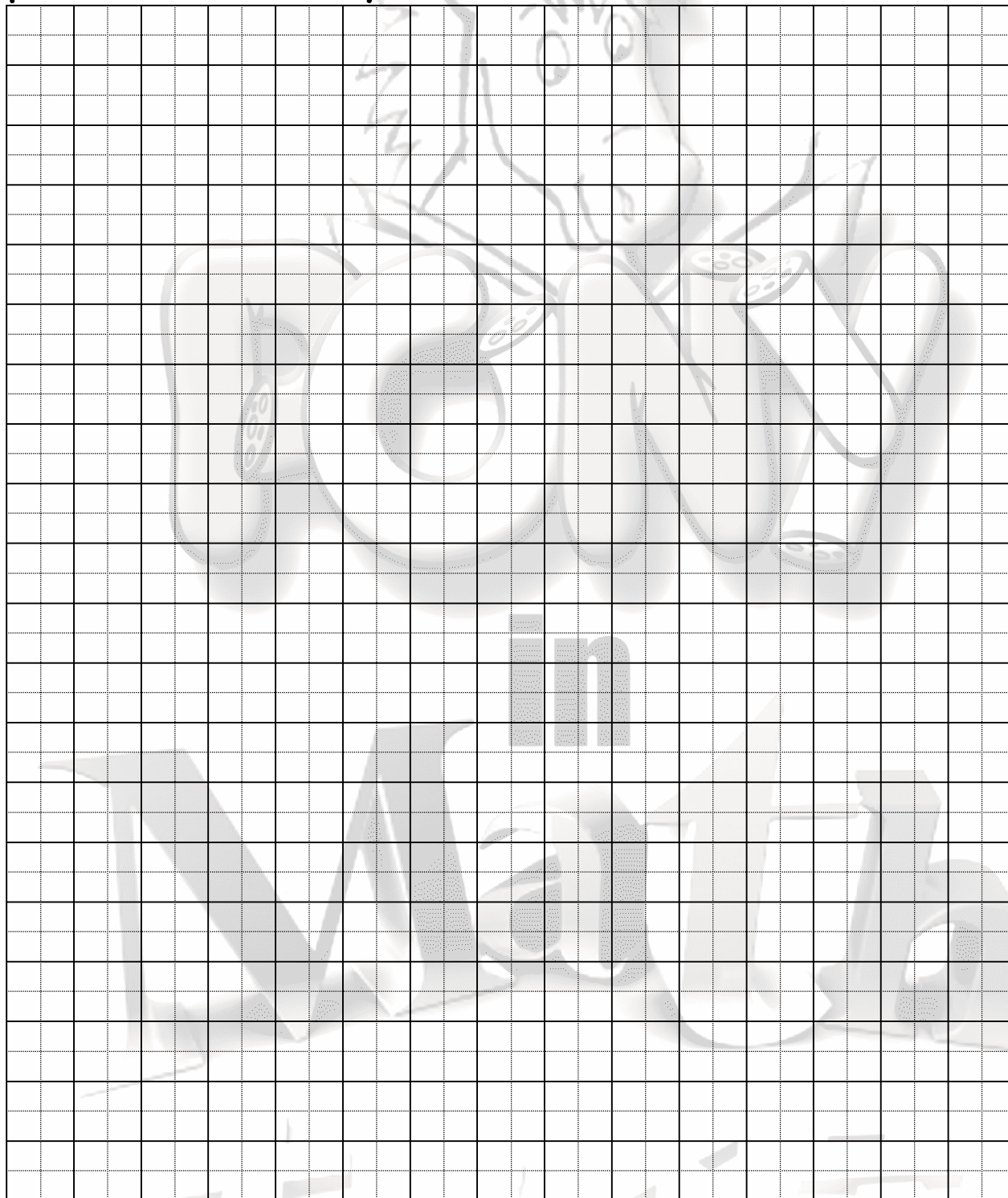| Day	Saturday	Sunday	Monday	Tuesday	Wednesday
In the morning	16°	15°	17°	20°	18°
Noon	26°	25°	30°	27°	28°

Represent these data by double bars .
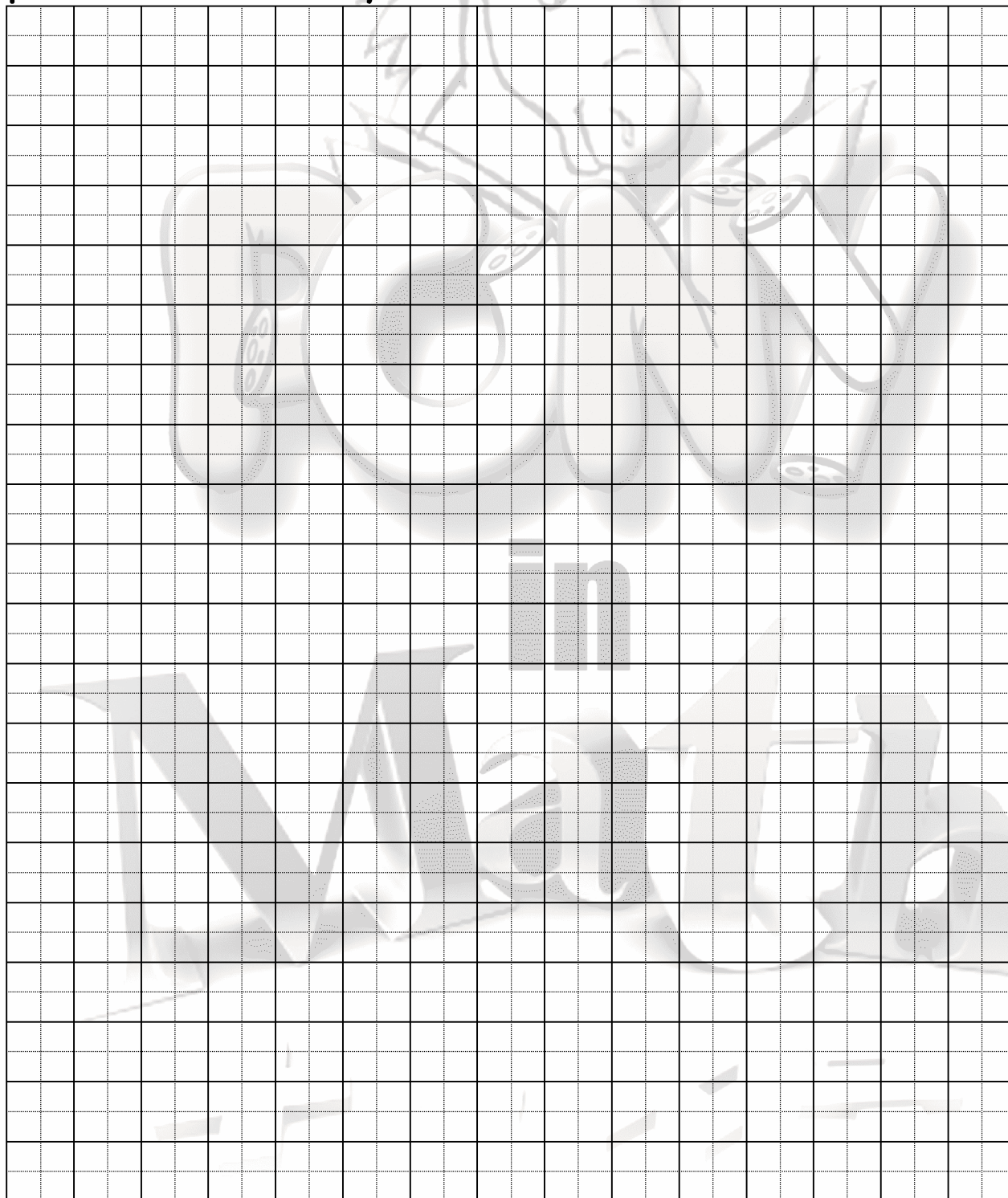
The table below, shows the number of pupils in primary 4 participating in school activities in a primary school.

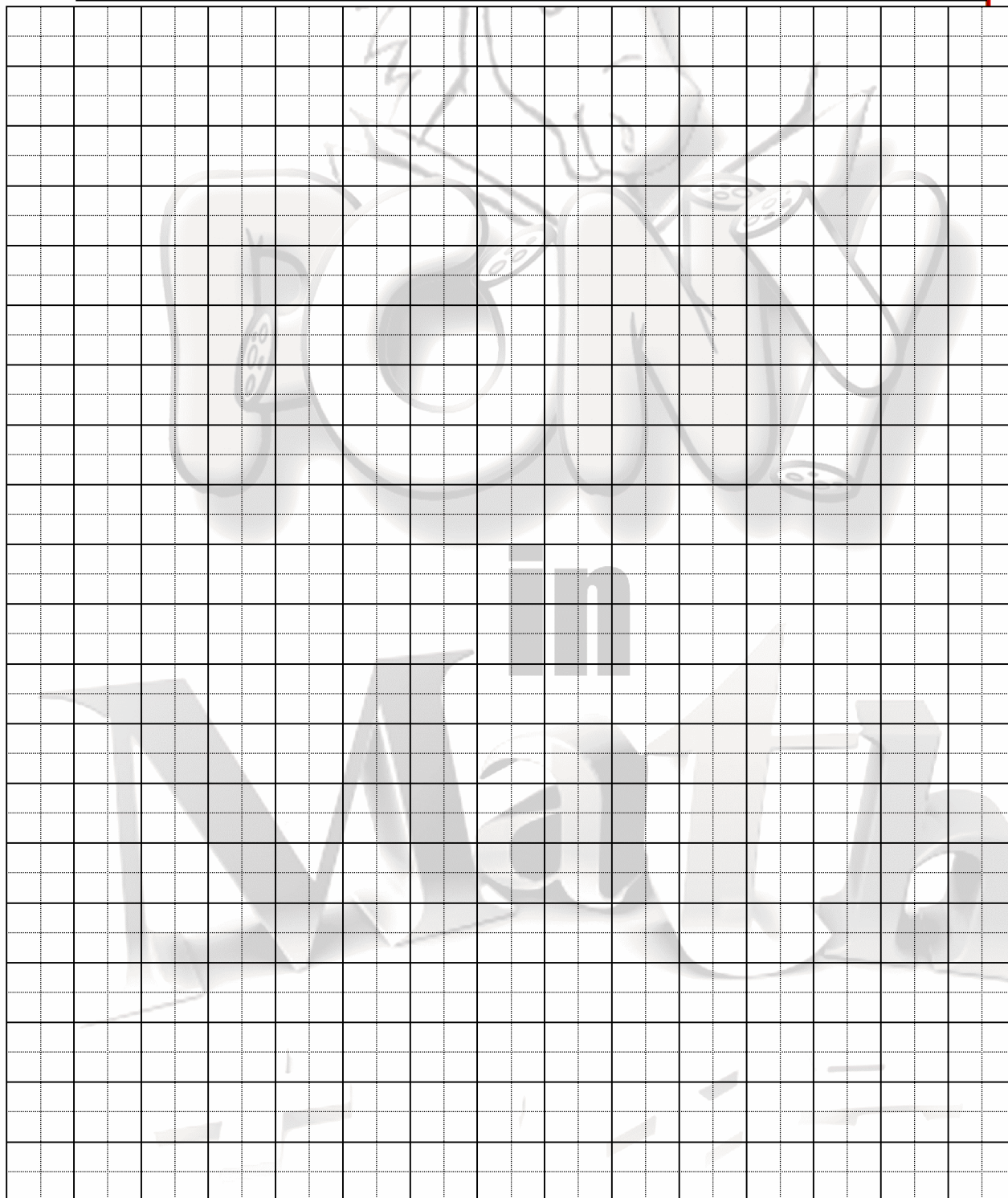| Activity	Sports	Social	Artistic	Cultural
Number of Pupils	45	25	30	15

Represent these data by bars .

The table opposite shows the number of visitors of the different museums in Egypt in two years, 2005/2006 and 2006/2007.

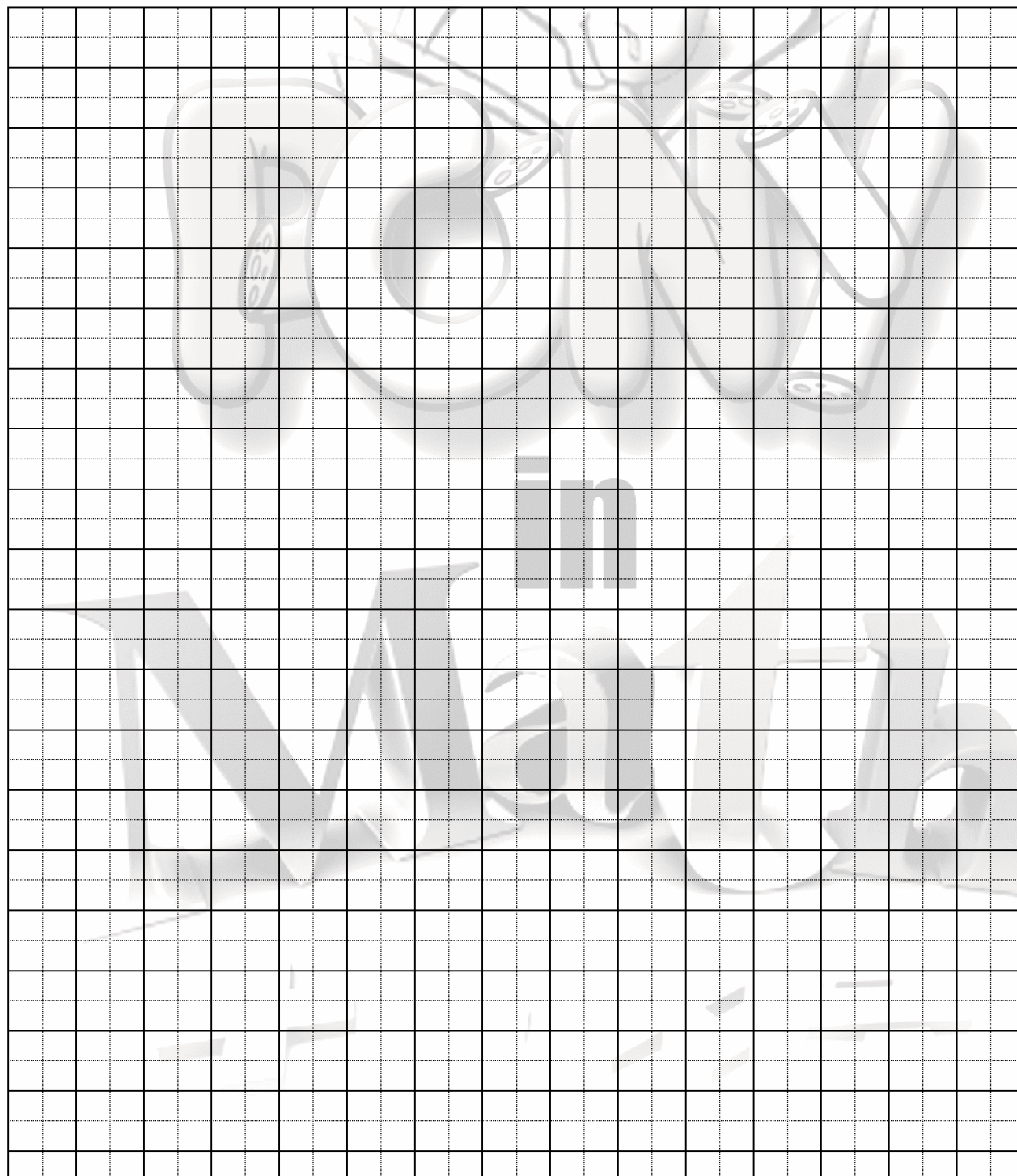| Museum Year	Historic	Artistic	National
2005/2006	120	15	10
2006/2007	150	40	10

The table below shows the number of hours that Walid and Fouad spend to study their lessons in a week.

| Day \ Pupil	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
Walid	3	4	3	6	4	2
Fouad	4	5	2	5	5	3

Represent these data by double bars.

The table below shows the production of hand made carpets that were exhibited by a group of producing families in an exhibition.

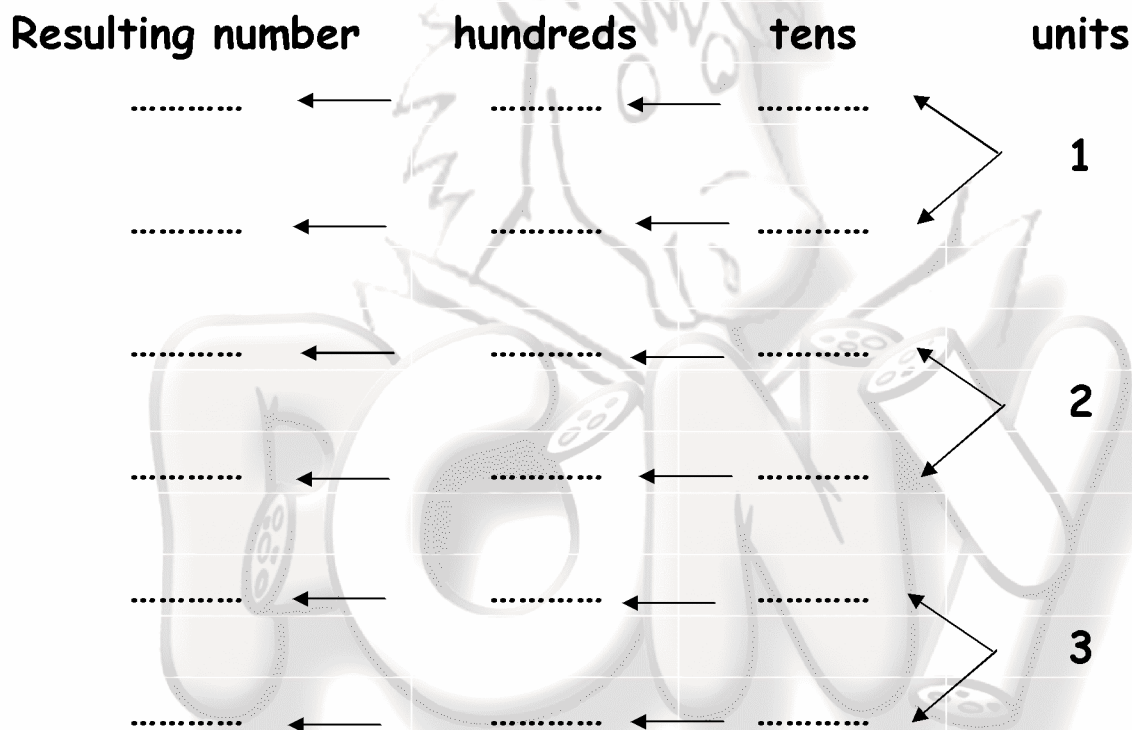| Family	First	Second	Third	Fourth	Fifth
Number of carpets	35	25	5	15	20

Represent these data, once using a histogram and another using Excel program on the computer.
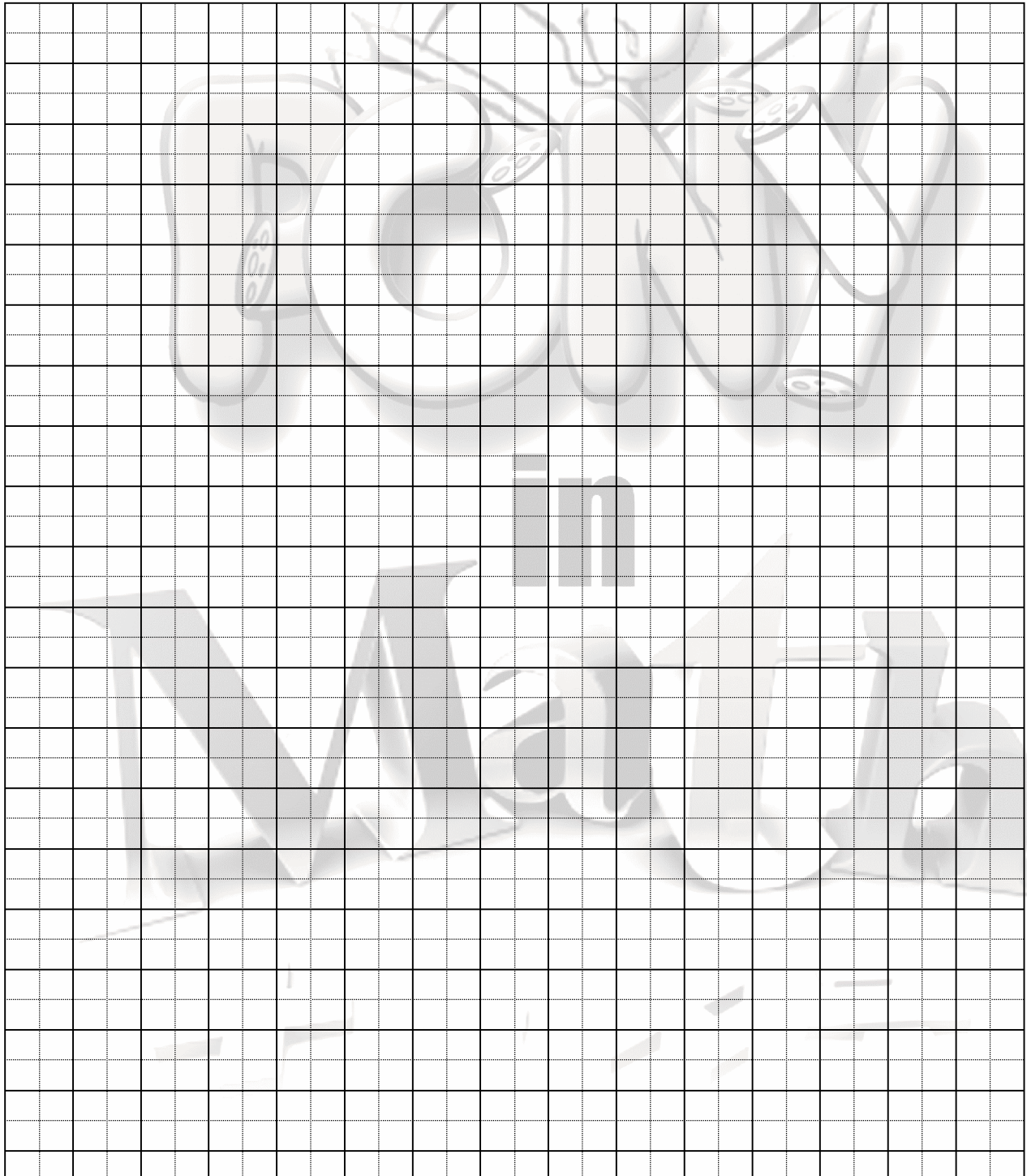
How many different 3-digit numbers are there using 1 , 2 and 3?
Write these numbers (using a tree-diagram)

Answer

Resulting number	hundreds	tens	units
.... ←	.... ←	.... ↖	
			1
.... ←	.... ←	.... ↙	
.... ←	.... ←	.... ↖	
			2
.... ←	.... ←	.... ↙	
.... ←	.... ←	.... ↖	
			3
.... ←	.... ←	.... ↙	

Using a tree-diagram, how many different 3-digit numbers
are there using   3, 7 and 9.

....
....
....
....
....
....
....
....
....
....
....
....

The Probability

In the opposite figure there are nine balls in a container

[A] Complete by write " Certain " , " Possible " , " Impossible " :

1) It is ……………………… to draw a black ball.

2) It is ……………………… to draw a white ball.

3) It is ……………………… to draw a green ball.
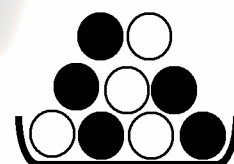
4) It is ……………………… to draw a ball.

If a container holds 5 black balls and 4 white balls , one ball is drawn:

1) The probability of the drawn ball being black = ………

2) The probability of the drawn ball being white = ………

3) The probability of the drawn ball being red = ………

If a container holds 5 black balls and 4 white balls , one ball is drawn blindly

4) The probability of the drawn ball being black = ………

5) The probability of the drawn ball being white = ………

6) The probability of the drawn ball being red = ………

A box contains 20 balls , 9 of them are green , 6 of them are red and 5 of them are blue . if a ball is drawn

1) The probability of the drawn ball being red = ………

2) The probability of the drawn ball being blue = ………

3) The probability of the drawn ball being green = ………

4) The probability of the drawn ball being white ball.=………

If a container holds 4 black balls and 3 white balls , one ball is drawn blindly

1) The probability of the drawn ball being black = ………

2) The probability of the drawn ball being white = ………

3) The probability of the drawn ball being red = ………
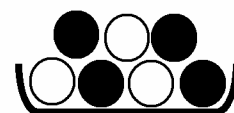
If you throw a dice (die) once, what is the probability of seeing :

1) the number one on the upper face = ...
2) the number 4 on the upper face = ...
3) the number 7 on the upper face = ...
4) the number 6 on the upper face = ...
5) an odd number on the upper face = ...
6) an even number on the upper face = ...
7) a number greater than six on the upper face = ...
8) a number smaller than six on the upper face = ...
9) a number smaller than one on the upper face = ...
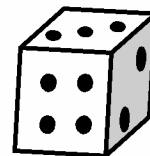
In a class of 40 pupils , 23 are boys and 17 are girls . one day , one of the pupils was absent .
What is the probability of the absent pupil being a boy ?........
What is the probability of the absent pupil being a girl ?........

In a class of 50 pupils , 30 are boys and. one day , one of the pupils was absent .
What is the probability of the absent pupil being a boy ?........
What is the probability of the absent pupil being a girl ?........

Kamal spun a coin 100 times. He got head 45 times. What is the probability of getting head or tail.
1) the probability of getting heads = ...
2) the probability of getting heads = ...

Sherin had a box of pins in which there were 100 pins. All pins fell on the floor. Some stood on their bases, like this ⊥ , and others fell tilted, like that ⤶ If the number of tilted pins were 35 pins, calculate the probability that a pin falls on its base.

The probability that a pin falls on its base = ...

The figure opposite shows a disc
divided into equal sectors numbered
from 1 to 10.
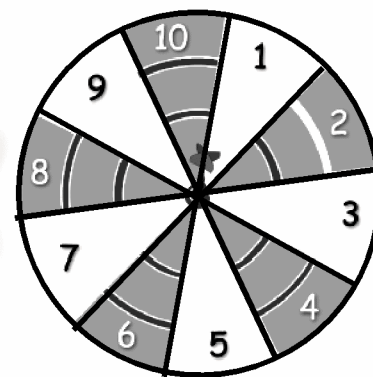
[1] Probability of the pointer pointing at
      The sector of the number 2 = ………

[2] Probability of the pointer pointing at
     The sector of the number 6 = ………

[3] Probability of the pointer pointing at a sector of a number
     more than 8 = ………

[4] Probability of the pointer pointing at a sector of a number
     Less than 3 = ………

[5] Probability of the pointer pointing at a sector of an even
     number = ………

[6] Probability of the pointer pointing at a sector of an odd
     number = ………

[7] Probability of the pointer pointing at a sector of a number
     more than 10 = ………

[8] Probability of the pointer pointing at a sector of a number
     more than 5 = ………

[8] Probability of the pointer pointing at a sector of a number
     Less than 1 = ………

[9] Probability of the pointer pointing at a sector of a number
     Less than 5 = ………