

Lesson 1-1 • Extra Practice (RM C1)**1) Fill in the blanks using the available answer choices.**

Amy has 5 chocolates and 7 pieces of bubble gum in her candy jar. Dan has 3 chocolates and 5 pieces of bubble gum in his candy jar. Amy thinks that the ratio of chocolates to bubble gum in both candy jars is the same, because they each have 2 more pieces of bubble gum than chocolate. Is the same ratio of chocolates to bubble gum maintained? Justify your response.

_____; Amy's ratio is _____:_____, and Dan's ratio is _____:
 (Blank 1) (Blank 2) (Blank 3) (Blank 4)
 _____.
 (Blank 5)

Blank 1 options

- ♦ yes
- ♦ no

Blank 2 options

- ♦ 3
- ♦ 5
- ♦ 7
- ♦ 12

Blank 3 options

- ♦ 3
- ♦ 5
- ♦ 7
- ♦ 12

Blank 4 options

- ♦ 3
- ♦ 5
- ♦ 7
- ♦ 8

Blank 5 options

- ♦ 3
- ♦ 5
- ♦ 7
- ♦ 8

2) Fill in the blanks using the available answer choices.

Lily's colored pencil box has 2 shades of red pencils and 5 shades of blue pencils. Joseph's box has 1 shade of red pencils and 4 shades of blue pencils. Lily thinks that the ratio of red pencils to blue pencils is the same for both boxes, because they each have 3 more shades of blue pencils than shades of red pencils. Is the same ratio of shades of red pencils to shades of blue pencils maintained? Justify your response.

_____; Lily's ratio is _____:_____, and Joseph's is _____:
 (Blank 1) (Blank 2) (Blank 3) (Blank 4)
 _____.
 (Blank 5)

Blank 1 options

- ♦ yes
- ♦ no

Blank 2 options

- ♦ 2
- ♦ 3
- ♦ 5
- ♦ 7

Blank 3 options

- ♦ 2
- ♦ 3
- ♦ 5
- ♦ 7

Blank 4 options

- ♦ 1
- ♦ 2
- ♦ 3
- ♦ 4

Blank 5 options

- ♦ 1
- ♦ 3
- ♦ 4
- ♦ 5

Student Name: _____

Date: _____

Lesson 1-1 • Extra Practice (RM C1)

- 3) A small package of craft beads contains the colors shown. A large package has the same ratio of colors as the small package. If the large package has 24 total beads, how many are gold?

Red	2
Silver	3
Gold	3

_____ gold beads

- 4) Nate made gift bags for his party. He used the number of items shown. Nate later decided to add more items to the bags. He kept the same ratio of items. If the new, larger gift bag has 18 total items, how many items are stickers?

Pencils	4
Stickers	3
Toys	2

_____ stickers

- 5) Gianna is making up bags of fruit for her soccer team. Each bag contains 2 strawberries, 4 blueberries, and 3 raspberries. If she used a total of 16 strawberries, how many raspberries did she use?

_____ raspberries

- 6) The owner of the Pizza Palace has a deal offering 1 free order of breadsticks with 3 pizzas. If 24 total pizzas were sold with this deal, how many orders of breadsticks were given away for free?

_____ orders

Lesson 1-1 • Extra Practice (RM C1)

- 7)** The ratio of pick-up trucks to SUVs at a car dealership is 2 : 9.

Check all statements that must be true based on the statement above.

If none of the statements is true, check "None of the above".

- ☐ For every 2 pick-up trucks at the car dealership, there are 9 SUVs.
- ☐ For every 2 SUVs at the car dealership, there are 9 pick-up trucks.
- ☐ There are exactly 2 pick-up trucks and exactly 9 SUVs at the car dealership.
- ☐ For every 9 pick-up trucks at the car dealership, there are 2 SUVs.
- ☐ None of the above

- 8)** Mark has 3 pens and 4 pencils in his backpack. Rachel has 6 pens and 7 pencils in her backpack. Mark thinks that they have the same ratio of pens to pencils since they each have one less pen than pencils.

- What is the ratio of pens to pencils in Mark's backpack?

- What is the ratio of pens to pencils in Rachel's backpack?

- Are the ratios the same? Use a bar diagram to help you decide.

- ☐ Yes
- ☐ No

- 9)** There are 3 boys in a class of 11 students. The rest of the students are girls.

What is the ratio of girls to boys?

- 10)** There are 3 green apples and 8 red apples in a basket.

What is the ratio of red apples to all apples in the basket?

- 11)** Write the ratio in two other ways.

The ratio of 17 : 3 may be written as _____ or _____.

Student Name: _____

Date: _____

Lesson 1-2 • Extra Practice (RM C1)

- 1) Maya's ice cream machine makes 4 cups of ice cream from 0.5 cup of sugar. How many cups of ice cream can be made with 5 cups of sugar?

_____cup(s)

- 2) To make his favorite shade of blue Jon mixes 3 cups of blue paint with 0.5 cups of white paint. How many cups of blue paint should Jon mix with 4 cups of white paint to get his favorite shade of blue?

_____cup(s)

- 3) Nikolas is having a birthday party. Three small cakes serve 9 people. How many cakes should he order to serve 27 guests at the party?

_____cake(s)

- 4) Rachel is hosting a family reunion. Two small trays of lasagna serve 6 people. How many small trays does she need to serve 48 people?

_____tray(s)

- 5) Lydia is having a barbecue. Two containers of juice serve 10 people. How many containers of juice should she get to serve 40 people at the barbecue?

_____container(s)

- 6) Jen can jump rope 80 times in 60 seconds. If she jumps at a constant ratio of seconds to jumps, how many jumps can she make in 15 seconds?

_____jump(s)

- 7) The school record for the greatest number of jumping jacks in a row is 84 in 4 minutes. If the record for jumping jacks made is a constant ratio, how many jumping jacks did the record holder make in 1 minute?

_____jumping jack(s)

- 8) A recipe for banana bread uses 4 cups of bananas for every 8 cups of flour. How many cups of bananas are needed when 2 cups of flour are used?

_____cup(s)

Student Name: _____

Date: _____

Lesson 1-2 • Extra Practice (RM C1)

- 9) A recipe for pasta noodles calls for 12 eggs for every 8 cups of flour. How many eggs are needed when 2 cups of flour are used?

_____ egg(s)

- 10) The track team's record for the greatest number of laps in 30 minutes is 48 laps. If the record holder ran at a constant ratio of minutes to laps, how many laps were completed in 5 minutes?

_____ lap(s)

- 11) Adam solved 12 math problems in 42 minutes. If he continues at this pace, how many minutes will it take him to solve 20 math problems?

_____ minute(s)

- 12) Melissa swam 32 laps in 18 minutes. If she continues at this pace, how many minutes will it take her to swim 80 laps?

_____ minute(s)

- 13) An ice cream shop sells 2 scoops of ice cream for \$6. What would be the cost for 9 scoops of ice cream?

\$ _____

- 14) An office supply store sells 8 notebooks for \$12. What is the cost of 20 notebooks?

\$ _____

- 15) Juan read 2 chapters of his book in 40 minutes. Assuming the chapters are of equal length, if he continues at this pace, how many chapters will he read in 100 minutes?

_____ chapter(s)

- 16) Jaime ran 10 laps in 30 minutes. He wants to increase the number of laps tomorrow in the same ratio. If he runs 25 laps, how many minutes will he take to finish?

_____ minute(s)

Student Name: _____

Date: _____

Lesson 1-3 • Extra Practice (RM C1)

- 1) A school administrator is purchasing 18 new chairs for each classroom. Generate the set of ordered pairs for the ratio relationship between the total number of chairs ordered y and the number of classrooms x for a total of 1, 2, 3, and 4 classrooms.

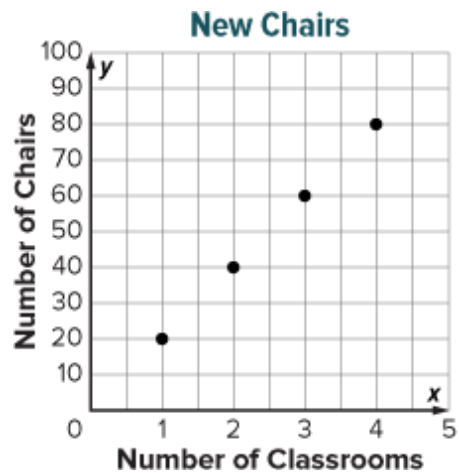
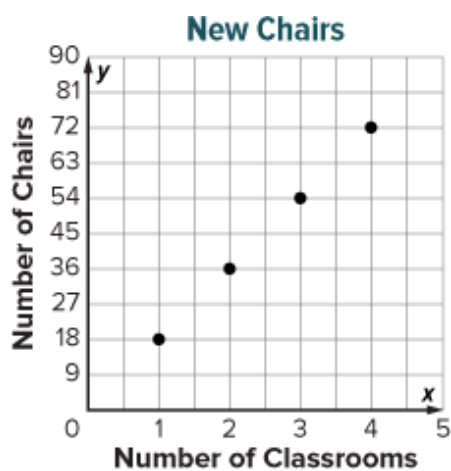
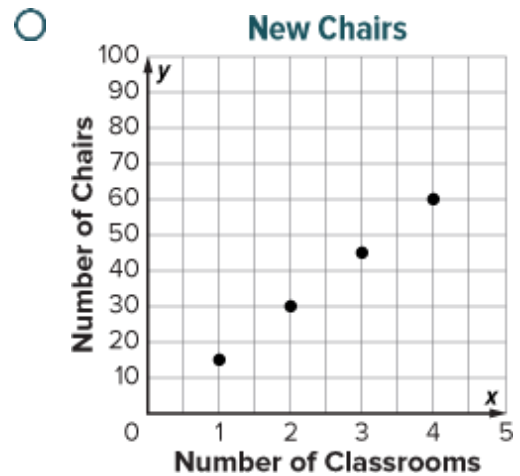
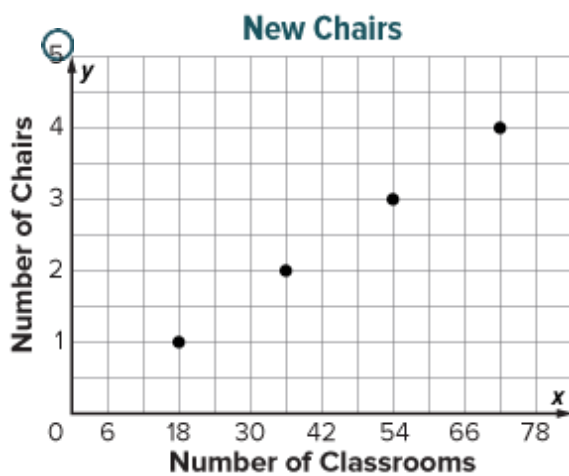
1
: _____

2
: _____

3
: _____

4
: _____

Which of the following shows the correct graph and description of the pattern in the graph for the situation?

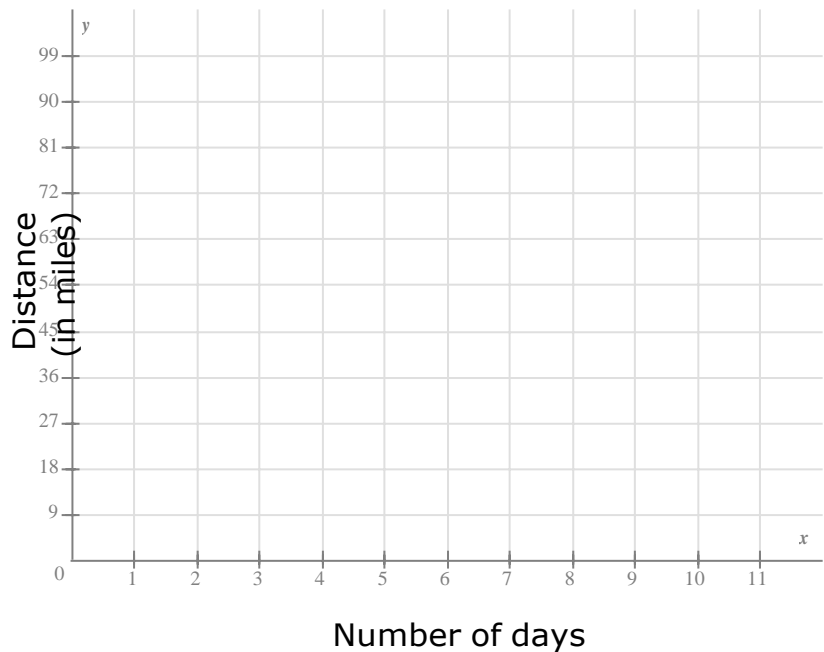


Lesson 1-3 • Extra Practice (RM C1)

- 2) Laura is practicing for an upcoming half marathon. Each day, Laura runs 9 miles.
(a) Fill in the table.

Number of days	Distance (in miles)
4	
5	
6	

- (b) Graph the ordered pairs from the table.



- (c) Describe the pattern in the graph of the ratio relationship.
- In the graph, the points appear to lie on a straight line. Going from left to right, each new point is _____ unit(s) to the right and _____ unit(s) up from the previous point. This shows that every day, Laura runs _____ miles.

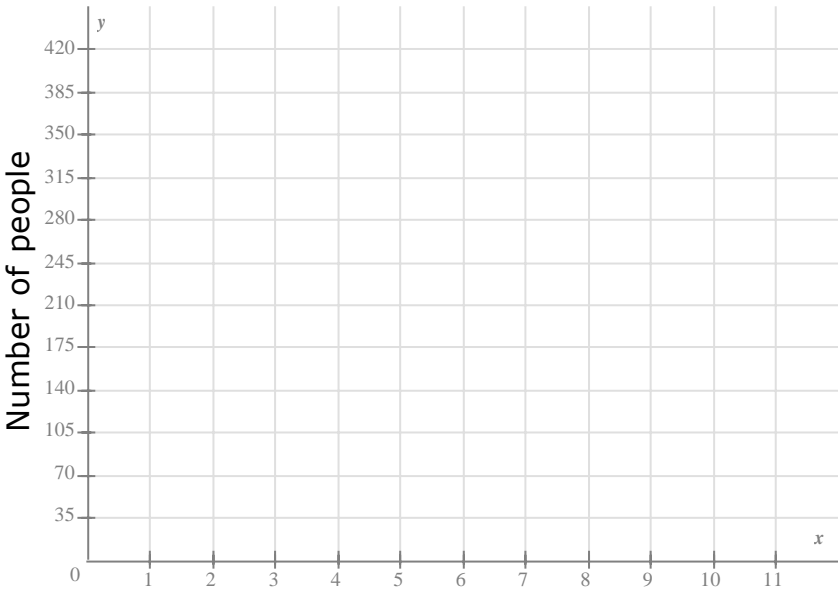
Lesson 1-3 • Extra Practice (RM C1)

3) At a large museum, there are 70 people in each tour group.

a. Fill in the table.

Number of tour groups	Number of people
2	
4	
5	

b. Graph the ordered pairs from the table.



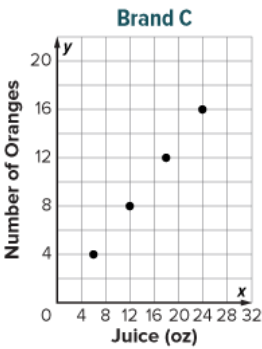
Lesson 1-4 • Extra Practice (RM C1)

1) Fill in the blanks using the available answer choices.

Juice Brand A advertises that it has 10 oranges in its 24-ounce juice carton. The advertised ratios of the number of oranges to ounces for two other juice brands are shown in the table and graph.

Brand B

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



Which brand advertises the greatest ratio of oranges to ounces of juice?
Justify your response.

Brand _____ advertises the greatest ratio of number of oranges to ounces of juice
(Blank 1)

because when all three ratio relationships are graphed on the same graph,
the graph for Brand _____ is the steepest.
(Blank 2)

- Blank 1

 - optionsA
 - B
 - C
- Blank 2

 - optionsA
 - B
 - C

Lesson 1-4 • Extra Practice (RM C1)

2) At the dance studio, Selena spends her time doing sets of 2 lunges for every 5 sets of spins, Arial spends her time doing sets of 2 lunges for every 4 sets of spins, and Nia spends her time doing sets of 7 lunges for every 10 sets of spins.

Complete the table for each person.

Selena

	2		6	
		10		20

Arial

		4		8	
	4		12		20

Nia

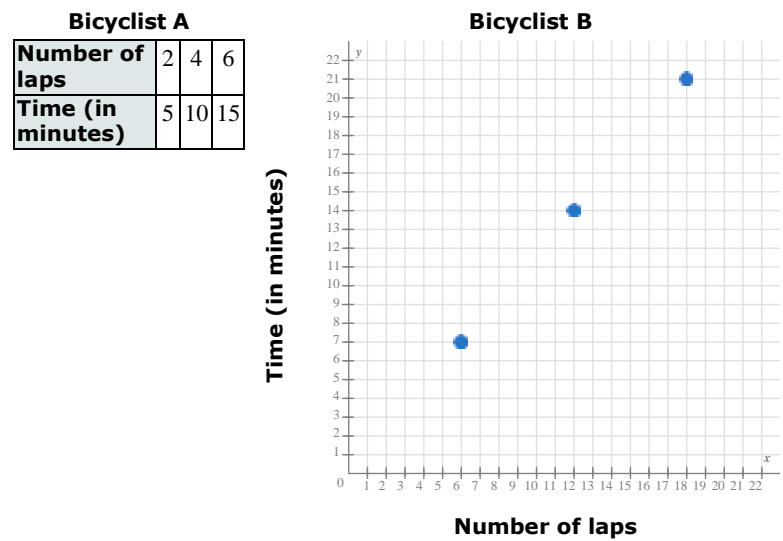
	7	
		20

Which person has the greatest ratio of lunges to spins?

When all three people do 20 sets of spins, ___ does the greatest number of lunges.
This means that _____ has the greatest ratio of lunges to spins.

Lesson 1-4 • Extra Practice (RM C1)

- 3) Two bicyclists are traveling around the same track. The number of laps completed by bicyclist A and the time it took in minutes is shown in the table. The number of laps completed by bicyclist B and the time it took in minutes is shown in the graph.



- a. How long does it take each bicyclist to complete 6 laps?

Bicyclist A: minutes

Bicyclist B: minutes

- b. Which bicyclist is the fastest?

Bicyclist A

Bicyclist B

Lesson 1-5 • Extra Practice (RM C1)

- 1) Findlay Center Middle School has 880 students. In Hiroaki's class, 3 out of 4 students buy lunch. Based on these results, how many students at the school can be expected to buy lunch?

_____ students

- 2) In a survey, the ratio of people who bought red balloons to green balloons is 2 to 5. If the number of people surveyed who bought red balloons is 620, how many people bought green balloons?

_____ people

- 3) The manager at a car dealership determines that an average of 120 vehicles is sold each month. If 2 out of 3 vehicles sold are SUVs, how many SUVs are sold each month?

_____ SUVs

- 4) At Austin Middle School, 2 out of 5 randomly selected students participate in the book fair. If there are 700 students at the middle school, how many students can be expected to participate in the book fair?

_____ students

- 5) In a survey, the ratio of teenagers who prefer a book to a tablet is 1 to 8. If the number of teenagers surveyed who prefer a book is 420, how many prefer a tablet?

_____ teenagers

- 6) Fill in the blank to make the ratios equivalent.

$$\frac{5}{9} = \frac{\underline{\hspace{2cm}}}{54}$$

- 7) Fill in the blank to make the ratios equivalent.

$$\frac{3}{15} = \frac{\underline{\hspace{2cm}}}{5}$$

- 8) Fill in the blank to make the ratios equivalent.

$$\frac{1}{8} = \frac{\underline{\hspace{2cm}}}{16}$$

Lesson 1-5 • Extra Practice (RM C1)

- 9) Solve the proportion.

$$\frac{2}{8} = \frac{6}{x}$$

The solution is $x =$ _____.

- 10) Solve the proportion.

$$\frac{3}{2} = \frac{p}{18}$$

The solution is $p =$ _____.

- 11) Solve the proportion.

$$\frac{8}{n} = \frac{88}{77}$$

The solution is $n =$ _____.

- 12) Solve the proportion.

$$\frac{t}{9} = \frac{28}{63}$$

The solution is $t =$ _____.

- 13) Nora sent 72 text messages last week. The ratio of the number of text messages Nora sent to the number of text messages Corey sent was 2 to 5. Based on this result, use a bar diagram to find how many text messages Corey sent.

Corey sent _____ text messages last week.

- 14) A certain middle school has 200 students. A school survey showed that three out of every four students have at least one pet. Based on this result, use a bar diagram to find how many of the 200 students have at least one pet.

_____ out of 200 students have at least one pet.

Student Name: _____

Date: _____

Lesson 1-6 • Extra Practice (RM C1)

- 1) A pitcher contains $4\frac{1}{2}$ pints of iced tea. How many fluid ounces of iced tea are in the pitcher?

_____ fluid ounces

- 2) A pot contains $2\frac{1}{2}$ gallons of water. How many pints of water are in the pot?

_____ pints

- 3) Ms. Adams pours $5\frac{1}{2}$ quarts of fruit punch into a bowl. How many cups of fruit punch are in the bowl?

_____ cups

- 4) The Red Trail is 3.5 miles long. How many yards long is the Red Trail?

_____ yards

- 5) Main Street is 1.5 miles long. How many feet long is Main Street?

_____ feet

- 6) James jogs 7,920 yards every week. How many miles does James jog every week?

_____ miles

- 7) A pitcher contains $1\frac{3}{4}$ quarts of milk. How many cups of milk are in the pitcher?

_____ cups

Student Name: _____

Date: _____

Lesson 1-6 • Extra Practice (RM C1)

- 8) A jug has $\frac{5}{8}$ gallon of water inside it. How many pints of water are in the jug?

_____ pints

- 9) The contents of a crate weigh 1,500 pounds. How many ounces do the contents of the crate weigh?

_____ ounces

- 10) The weight of the items in a truck is $\frac{2}{5}$ ton. How many pounds do the items in the truck weigh?

_____ pounds

- 11) A small car weighs 2,400 pounds. How many tons does the car weigh?

_____ tons

- 12) A freight elevator can hold up to 4,500 pounds. How many tons can the freight elevator hold?

_____ tons

- 13) Kan hit a golf ball 5,400 inches. How many feet did Kan hit the golf ball?

_____ feet

- 14) Lily lives 675 feet from the library. How many yards does Lily live from the library?

_____ yards

Student Name: _____

Date: _____

Lesson 1-6 • Extra Practice (RM C1)

- 15) A tub contains 1,280 cups of water. How many gallons of water does the tub contain?

_____ gallons

- 16) A sports cooler contains up to 320 pints of liquid. How many gallons of liquid can the sports cooler hold?

_____ gallons

- 17) Ramon drank 72 fluid ounces of water today. How many quarts of water did Ramon drink today?

_____ quarts

- 18) Jana buys 92 fluid ounces of fruit juice. How many cups of fruit juice does Jana buy?

_____ cups

- 19) One gallon of blueberries weighs about 6 pounds. About how many gallons of blueberries would weigh $\frac{1}{2}$ ton?

_____ gallons

- 20) One quart of butter weighs about 32 ounces. About how many quarts of butter would weigh 200 pounds?

_____ quarts

Lesson 1-6 • Extra Practice (RM C1)

- 21) A volcano on a recently discovered planet rises to a height of 73,568.417 ft.

Use the table of facts to find the height of the volcano in *miles*.

Round your answer to the nearest tenth.

Conversion facts for length	
12 inches (in)	= 1 foot (ft)
3 feet (ft)	= 1 yard (yd)
36 inches (in)	= 1 yard (yd)
5280 feet (ft)	= 1 mile (mi)
1760 yards (yd)	= 1 mile (mi)

_____ mi

- 22) A bridge connecting two cities separated by a lake has a length of 5.651 mi.

Use the table of facts to find the length of the bridge in *yards*.

Round your answer to the nearest tenth.

Conversion facts for length	
12 inches (in)	= 1 foot (ft)
3 feet (ft)	= 1 yard (yd)
36 inches (in)	= 1 yard (yd)
5280 feet (ft)	= 1 mile (mi)
1760 yards (yd)	= 1 mile (mi)

_____ yd

Student Name: _____

Date: _____

Lesson 1-7 • Extra Practice (RM C1)

- 1) Evan can run 4 kilometers in 20 minutes. At this rate, how far can Evan run in 1 minute?

__kilometer(s) per minute

- 2) A train travels 18 kilometers in 12 minutes. At this rate, how far does the train travel in 1 minute?

__kilometer(s) per minute

- 3) Ana can bike 9 kilometers in 24 minutes. At this rate, how far can Ana bike in 1 minute?

__kilometer(s) per minute

- 4) Jerry earned \$420 last week. He worked 25 hours and earned the same amount each hour. How much was he paid per hour?

\$__per hour

- 5) Mina earned \$312 last week. She worked 15 hours and earned the same amount each hour. How much was she paid per hour?

\$__per hour

- 6) Dave earned \$637 last week. He worked 35 hours and earned the same amount each hour. How much was he paid per hour?

\$__per hour

Student Name: _____

Date: _____

Lesson 1-7 • Extra Practice (RM C1)

- 7) Alan tested three cameras last weekend. The table below shows the number of pictures taken and how much time it took.

	First camera	Second camera	Third camera
Number of pictures	49	90	45
Time (seconds)	7	9	5

Write the number of pictures taken per second for each camera. Then determine which camera took pictures the fastest.

Number of pictures taken per second for the first camera: _____

Number of pictures taken per second for the second camera: _____

Number of pictures taken per second for the third camera: _____

Select the camera that takes pictures the fastest.

- ☐ First camera
- ☐ Second camera
- ☐ Third camera

- 8) Customers of a certain credit card earn points for using the card. The table below shows the number of points earned for the amount spent.

Number of points	27	45	72
Dollars spent	3	5	9

Choose the correct description.

- ☐ Each dollar spent does *not* always earn the same number of points.
- ☐ Each dollar spent appears to earn the same number of points.

Lesson 1-8 • Extra Practice (RM C1)

- 1) At Just T-shirts, Mr. Washington can buy 5 T-shirts for \$75.50. At Tee City, he can buy 3 T-shirts for \$47.70. He is buying 15 T-shirts. How much will he save if he buys the shirts from Just T-shirts?

\$_____

- 2) Ms. Ramos can buy 5 pens from her local shop for \$2.75. She can buy 10 of the same pens on the Internet for \$5.25. Ms. Ramos wants to buy 20 pens. How much will she save if she buys the pens on the Internet?

\$_____

- 3) Jenna can buy 5 golf balls at Golf Central for \$9.20 or 4 golf balls at Strictly Golf for \$7.60. Jenna wants to buy 20 golf balls. How much will she save if she buys the golf balls from Golf Central?

\$_____

- 4) Mr. Alfonso is ordering shrimp. He can order 3 pounds of shrimp at Earl's Shrimp Hut for \$38.25. He can order 4 pounds of shrimp at Shrimpie's for \$50.00. If Mr. Alfonso needs 12 pounds of shrimp, how much will he save if he buys the shrimp from Shrimpie's?

\$_____

- 5) Willie and Pedro are reading the same book. Willie read 108 pages in 3 hours, and Pedro read 160 pages in 5 hours. How many more pages per hour did Willie read?

_____pages

- 6) Ayanna and Makena wanted to see who jogs faster. Ayanna jogged 900 meters in 6 minutes. Makena jogged 620 meters in 4 minutes. How many more meters per minute did Makena jog?

_____meters

- 7) George has two routes that he likes to use for walking. He can walk 672 yards in 6 minutes on Path A, and he can walk 984 yards in 8 minutes on Path B. How many more yards per minute can George walk on Path B?

_____yards

- 8) Dae and Eric are working together on a paper. Dae typed 333 words in 9 minutes, and Eric typed 252 words in 6 minutes. How many more words per minute did Eric type?

_____words

Lesson 1-8 • Extra Practice (RM C1)

- 9) Lourdes can buy 3-packs of paper for \$10.50, or she can buy 4-packs of paper for \$13.50. She wants to buy 12 packs of paper. How much more will she spend if she buys only 3-packs of paper?
- \$_____
- 10) Grant can buy 6-packs of table-tennis balls for \$2.10 or 9-packs of table-tennis balls for \$2.88. Grant wants to buy 18 table-tennis balls. How much more will he spend if he buys only 6-packs of table-tennis balls?
- \$_____
- 11) Ride tickets at the fair can be bought in packs of 5 tickets for \$8.75 or 3 tickets for \$6.25. Simone wants to buy 15 tickets. At these rates, how much more will she spend if she only buys packs of 3 tickets?
- \$_____
- 12) Al's Bowling Center offers its customers 1 game for \$4.40 or 2 games for \$8.40. The games can be played by one bowler or by a group of bowlers. If a group wants to play 4 games, how much more will its members spend by buying the games one at a time instead of buying the 2-game packs?
- \$_____
- 13) Ava can swim 70 yards in 2 minutes. At this rate, how many yards would you expect her to swim in 5 minutes?
- _____yards
- 14) Owen can jog 660 yards in 3 minutes. How many yards would you expect him to jog in 10 minutes?
- _____yards
- 15) Selena can type 220 words in 5 minutes. At this rate, how many words would you expect her to type in 12 minutes?
- _____words
- 16) A group hiked 760 meters in 8 minutes. At this rate, how many meters would you expect its members to hike in 20 minutes?
- _____meters