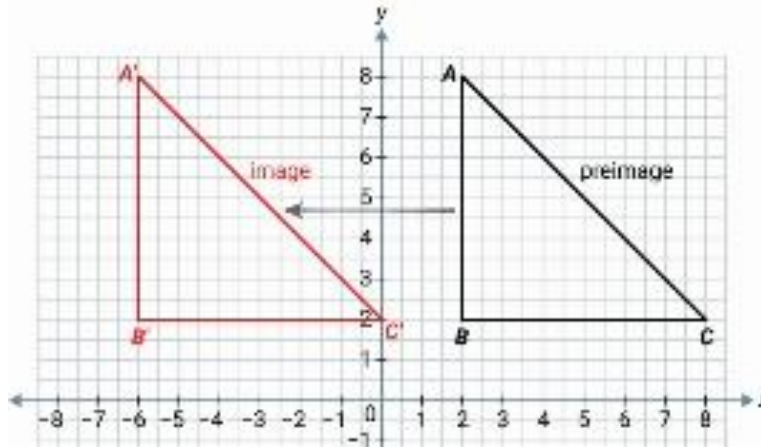


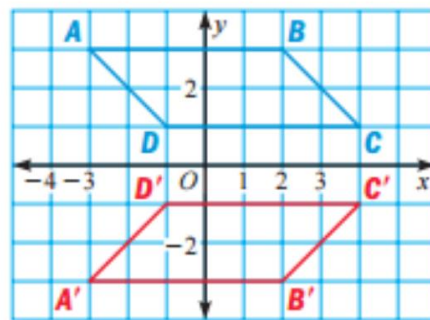
Department of education and knowledge Al Dhafer School. Mathematics department - Grade 8	الإمارات العربية المتحدة وزارة التربية والتعليم Revision Test # 4 Term 2	دائرة التعليم والمعرفة مدرسة الظاهر قسم الرياضيات - الصف الثامن
Translation, Reflection, Rotation, Dilation, Similar Triangles and Indirect Measurement		
Name: _____ class : 8 / _____ Date: _____		

1) Describe the translation of the triangle ABC to the triangle A'B'C'.



8 units to the right	8 units up	8 units down	8 units to the left
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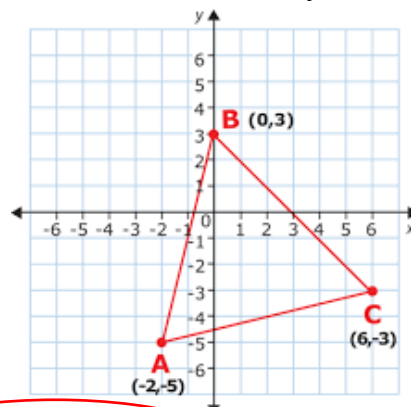
2) Identify the transformation



Reflection across y-axis	Reflection across x-axis	Translation 2 units down	180° Rotation
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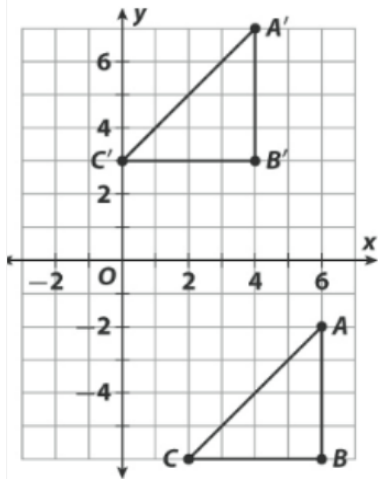
3) Triangle ABC is going to be translated.

Where would B' position be at, if the translation was be $(x,y) \rightarrow (x+3, y-2)$



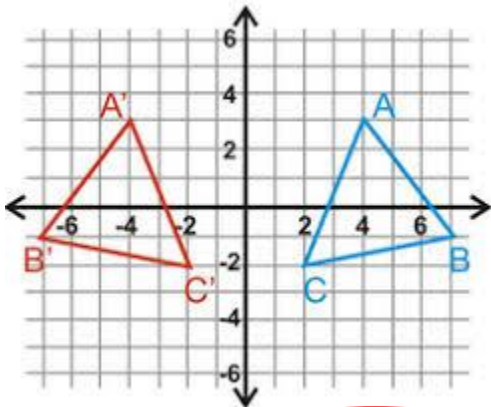
(-1,3)	(3,1)	(3,5)	(5,8)
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4) Determine how to translate triangle ABC to triangle A'B'C'.



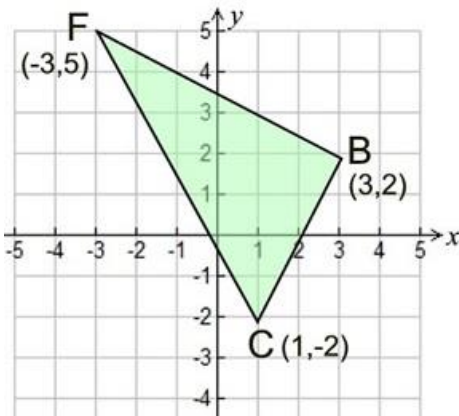
$(x-2, y-9)$	$(x+2, y-9)$	$(x-2, y+9)$	$(x+2, y-5)$
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5) Identify the transformation from ABC to A'B'C'.



90° clockwise rotation	90° counter clockwise rotation	Reflection across the y-axis	Reflection across the x-axis
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6) If you were to rotate BCF 180° about the origin, what would the coordinate of F' be?



$(-5, 3)$	$(-5, 5)$	$(-3, -5)$	$(3, -5)$
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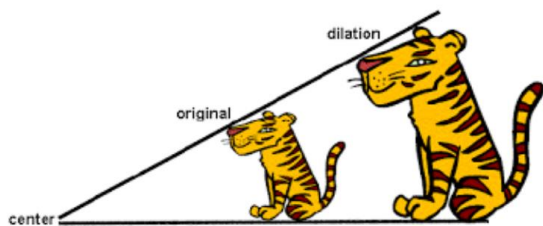
7) Reflect the point (2, -4) over the y-axis.

(-2, -4)	(-4, 2)	(2, 4)	(-2, 4)
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8) Reflect (6, -3) over the line x-axis.

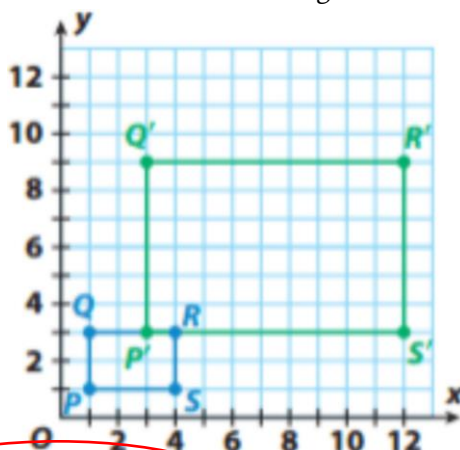
(6, 3)	(-3, 6)	(3, -6)	(-6, -3)
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9) Which rule would show a dilation with a scale factor of 4?



$(x, y) \rightarrow (y, x)$	$(x, y) \rightarrow (x + 4, y + 4)$	$(x, y) \rightarrow (x, -y)$	$(x, y) \rightarrow (4x, 4y)$
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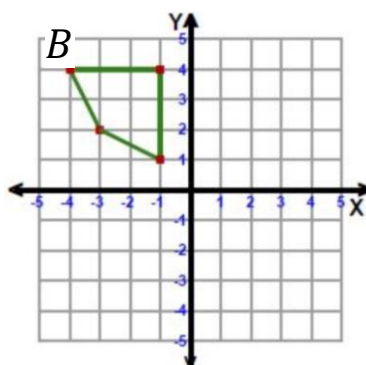
10) An office supply store sells index cards in two different sizes. The large size is an enlargement of the small size. Both sizes are shown. Find the scale factor of the enlargement.



2	3	4	5
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11) This shape is being reflected in the y-axis. The top left point (-4, 4) is point B.

Where would B' be located at?

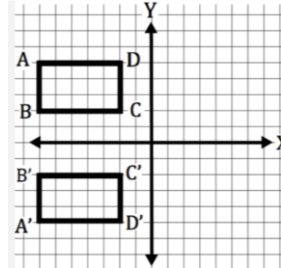


(4, 4)	(-4, 4)	(4, 1)	(3, 2)
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12) A turn is also called a _____.

Translation	Rotation	Reflection	Transformation
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13) Identify the transformation from ABCD to A'B'C'D'.



90° clockwise rotation	90° counter clockwise rotation	Translation	Reflection across the x-axis
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14) Triangle ABC has coordinates A(-3, -2), B(-3, -5), and C(-7, -6).

- Find and graph the coordinates of A'B'C' after a reflection of ABC across the x-axis
- Find and graph the coordinates of A''B''C'' after a 90° clockwise rotation of A'B'C' around the origin.

A'(-3, 2)

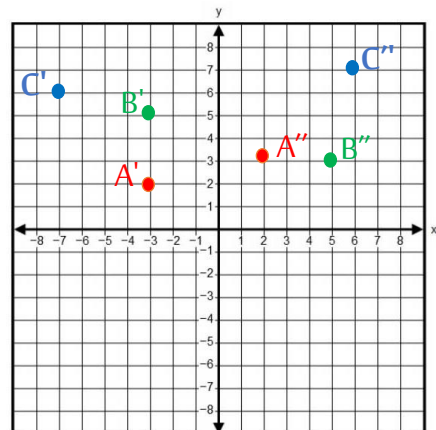
A''(2, 3)

B'(-3, 5)

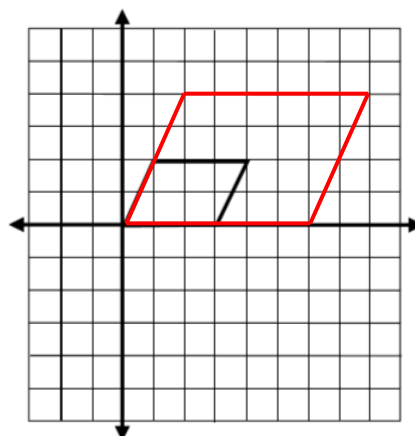
B''(5, 3)

C'(-7, 6)

C''(6, 7)



15) Dilate the parallelogram below from the origin using scale factor of 2.



15)

a- $\triangle PQR \sim \triangle DEF$. Find x .

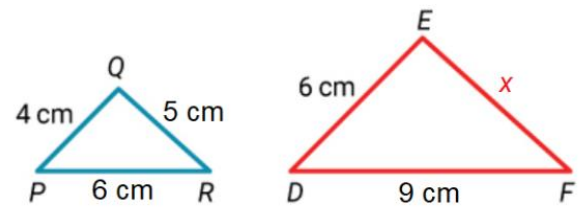
$$\frac{EF}{QR} = \frac{ED}{QP}$$

$$\frac{x}{5} = \frac{6}{4}$$

$$4x = 5 \times 6$$

$$x = \frac{30}{4}$$

$$x = 7.5 \text{ cm}$$



b- The shadow of a 7 m long tree is 8.4 m long.

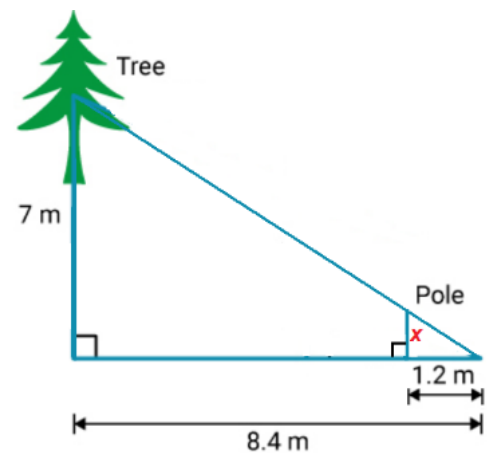
The shadow of a pole is 1.2 m in length. Find the height x of the pole.

$$\frac{x}{7} = \frac{1.2}{8.4}$$

$$8.4x = 7 \times 1.2$$

$$x = \frac{8.4}{8.4}$$

$$x = 1 \text{ m}$$



c- $\triangle ACB \sim \triangle ECD$, Find the value of x .

$$\frac{x}{6} = \frac{12}{4}$$

$$\frac{x}{6} = 3$$

$$x = 6 \times 3$$

$$x = 18 \text{ cm}$$

