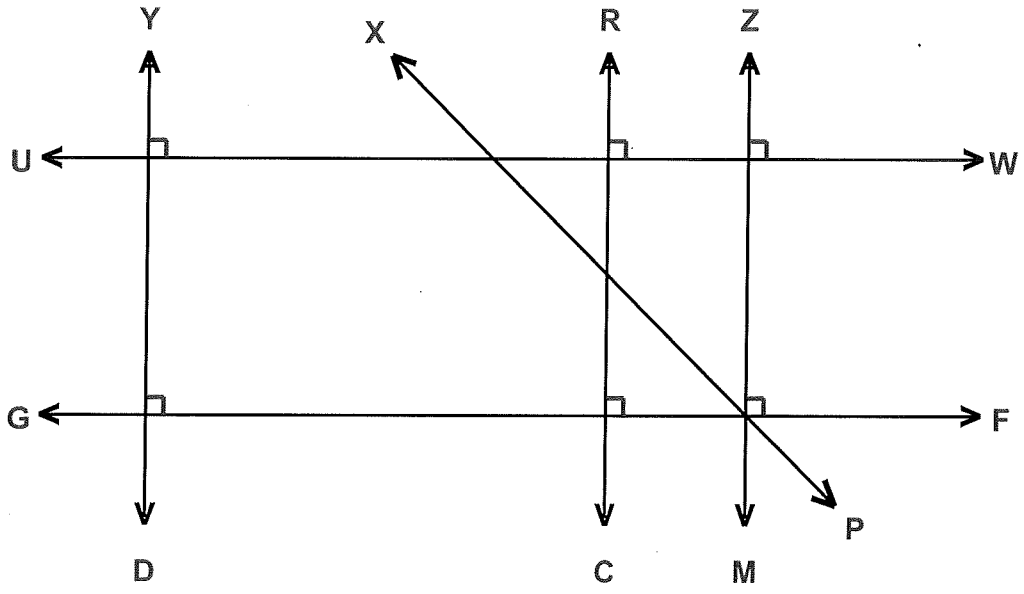
Name : _____ Score : _____

Teacher : _____ Date : _____

Identify Parallel, Perpendicular, and Intersecting Lines

Identify the given pair of lines as either parallel, perpendicular, or intersecting.

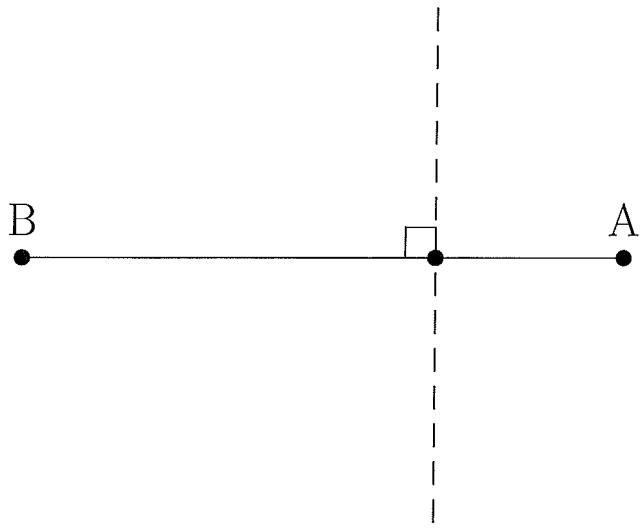


1) Line GF and Line YD are Perpendicular lines.	6) Line ZM and Line RC are Parallel lines.
2) Line XP and Line RC are Intersecting lines.	7) Line UW and Line XP are Intersecting lines.
3) Line UW and Line ZM are Perpendicular lines.	8) Line UW and Line RC are Perpendicular lines.
4) Line ZM and Line XP are Intersecting lines.	9) Line GF and Line XP are Intersecting lines.
5) Line UW and Line GF are Parallel lines.	10) Line YD and Line ZM are Parallel lines.

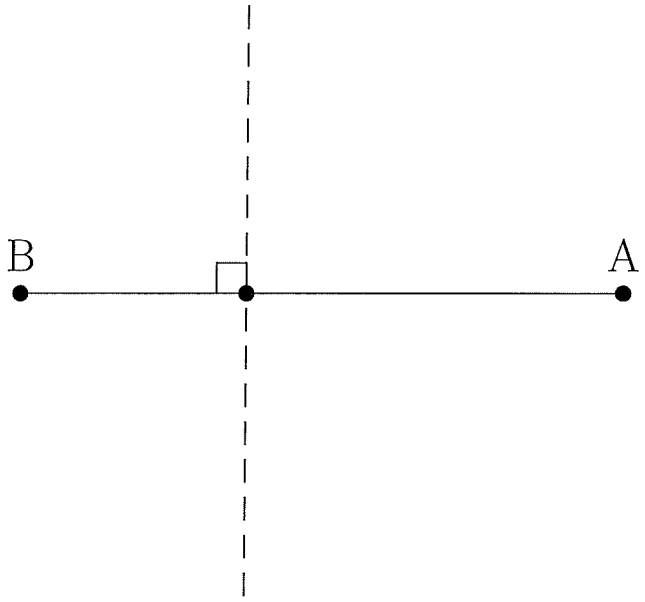
Perpendicular Lines (A) Answers

Construct a line perpendicular to the segment through the unlabeled point.

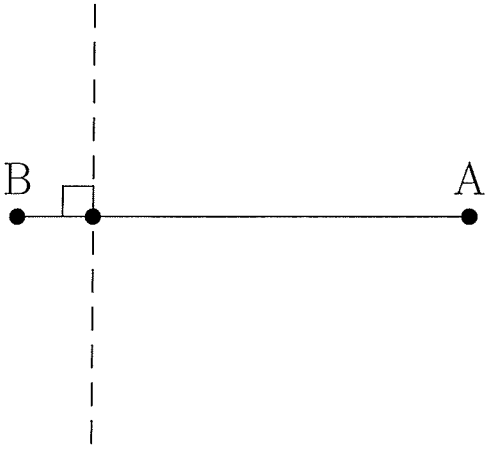
1.



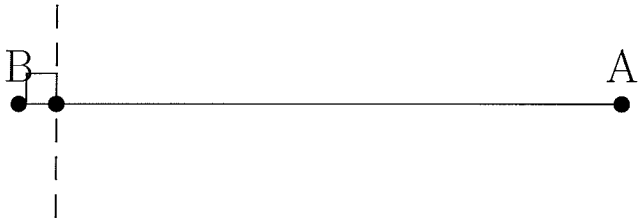
2.



3.

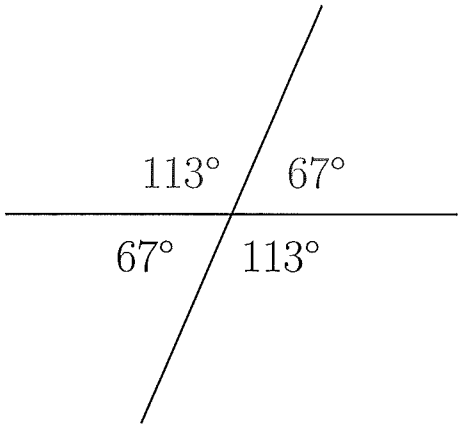


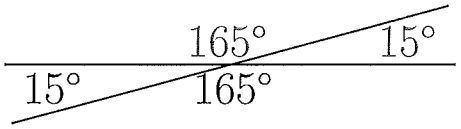
4.

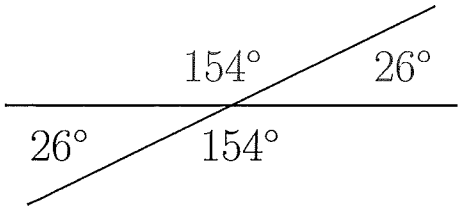


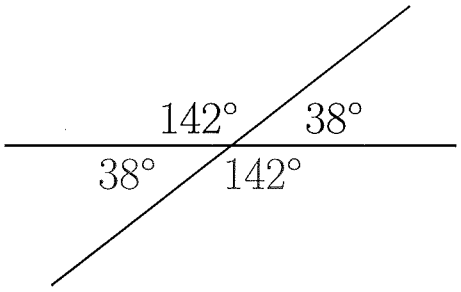
Vertical Angles (A) Answers

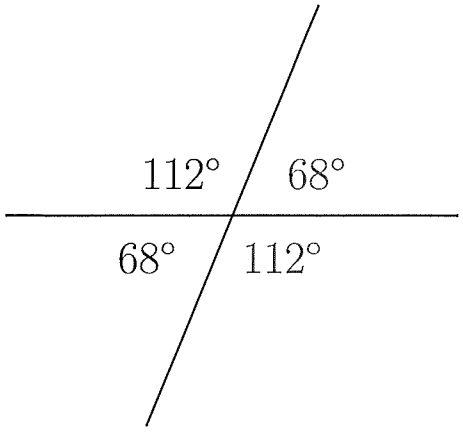
Find the vertical angle measurements for the measured angles.

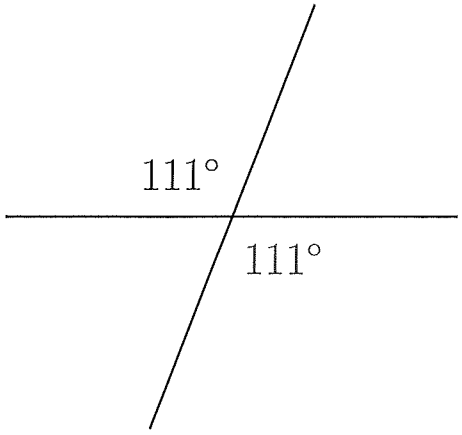






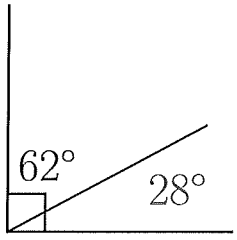


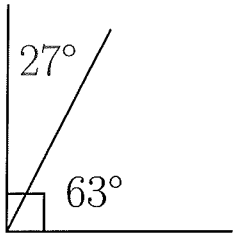


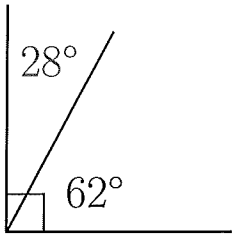


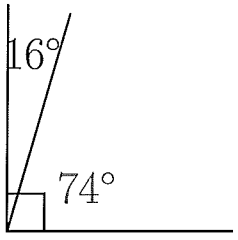
Complementary Angles (A) Answers

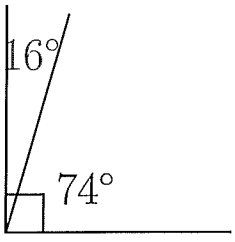
Find the complementary angle measurement for each measured angle.

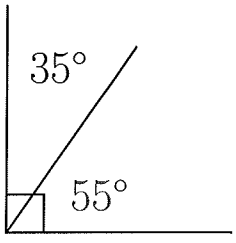






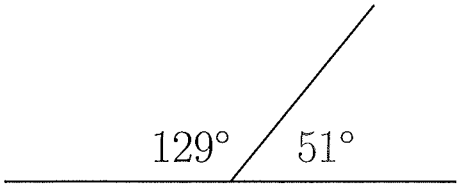


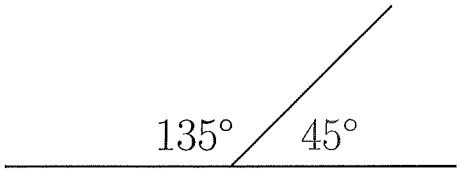


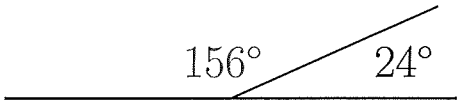


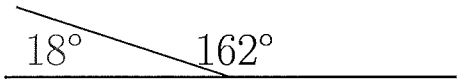
Supplementary Angles (A) Answers

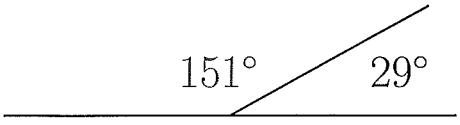
Find the supplementary angle measurement for each measured angle.

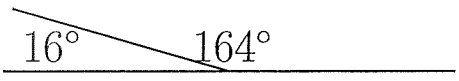








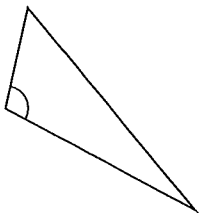




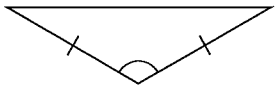
Classifying Triangles by Angle and Side Properties (A) Answers

Name: _____ Date: _____

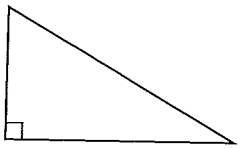
Classify each triangle using its angle and side properties.

1. 

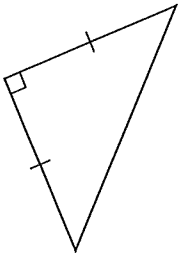
obtuse scalene

2. 

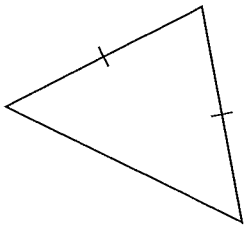
obtuse isosceles

3. 

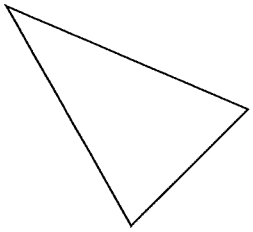
right scalene

4. 

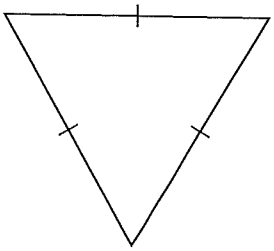
right isosceles

5. 

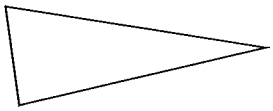
acute isosceles

6. 

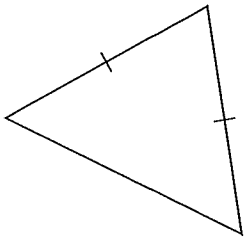
acute scalene

7. 

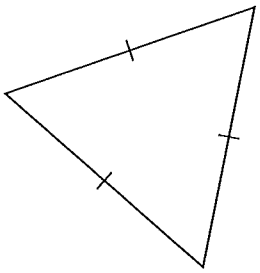
acute equilateral

8. 

acute scalene

9. 

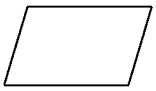
acute isosceles

10. 

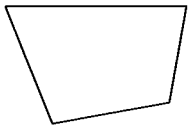
acute equilateral

Classifying Quadrilaterals (A) Answers

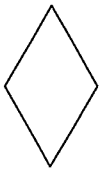
Identify each quadrilateral.



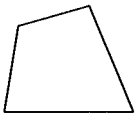
parallelogram



quadrilateral

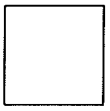


rhombus

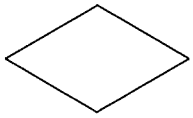


quadrilateral

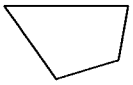
square



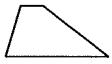
square



rhombus



quadrilateral



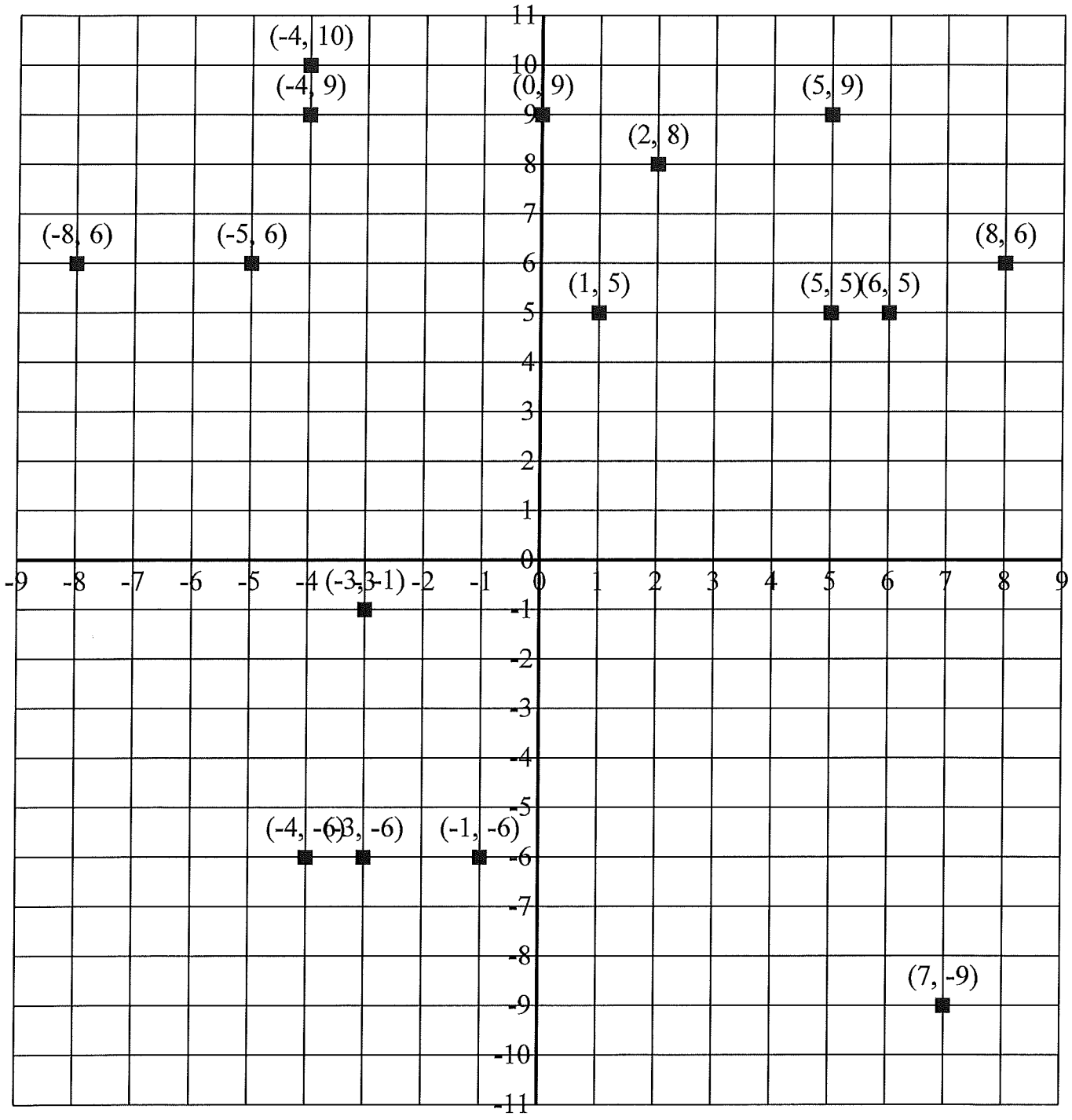
trapezoid

rectangle

Plotting Coordinate Points (A) Answers

Plot the coordinate points below.

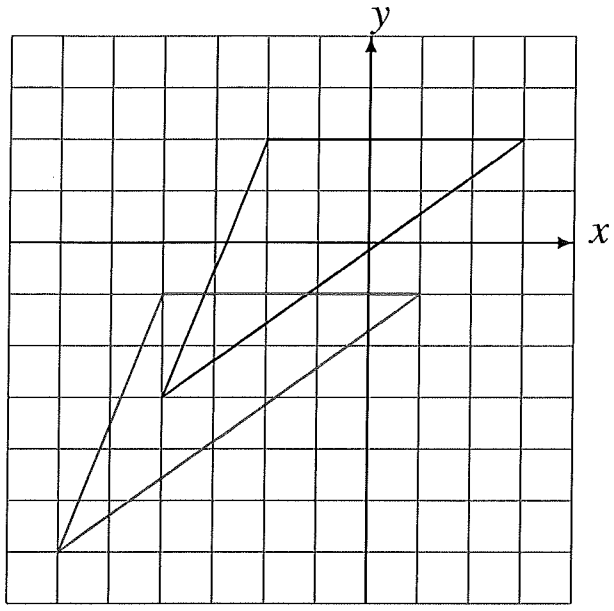
(-4, 10)	(7, -9)	(0, 9)	(-8, 6)	(-4, -6)	(6, 5)	(-3, -1)	(5, 5)
(-5, 6)	(-3, -6)	(-1, -6)	(5, 9)	(8, 6)	(1, 5)	(-4, 9)	(2, 8)



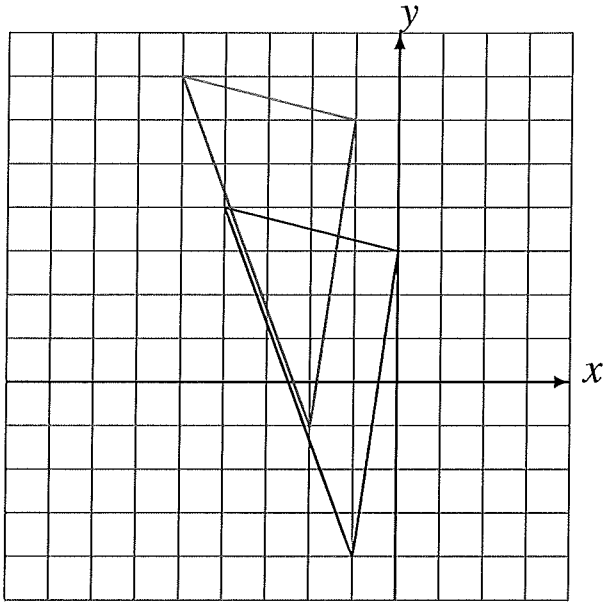
Translations (A) Answers

Draw each translated image.

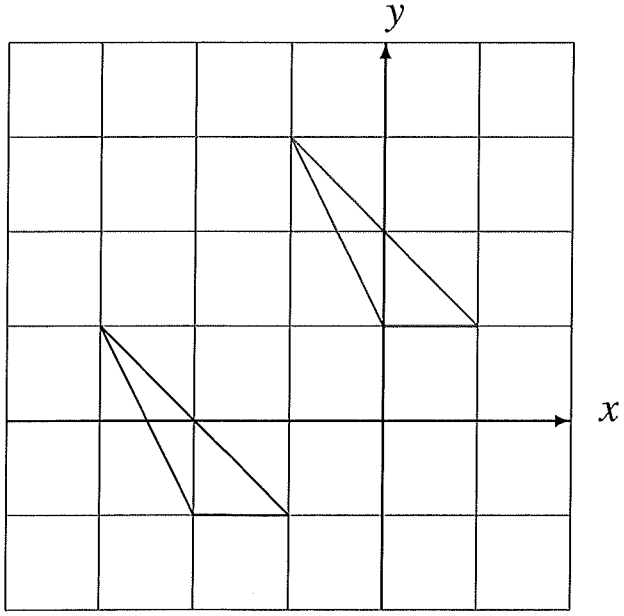
Translate by (-2, -3).



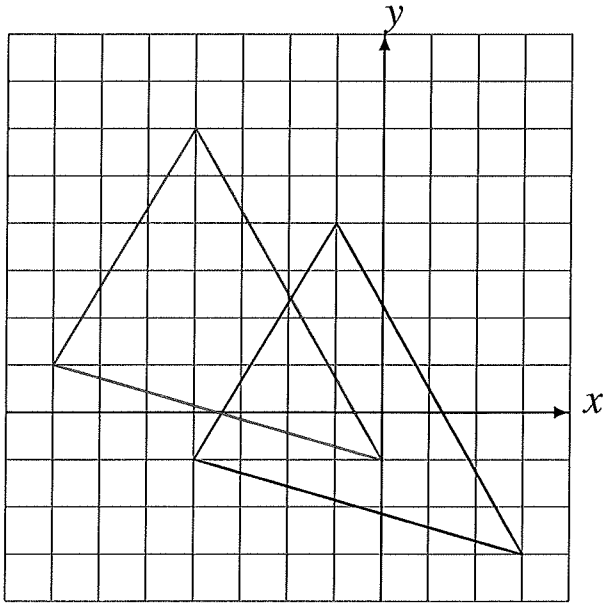
Translate by (-1, 3).



Translate by (2, 2).



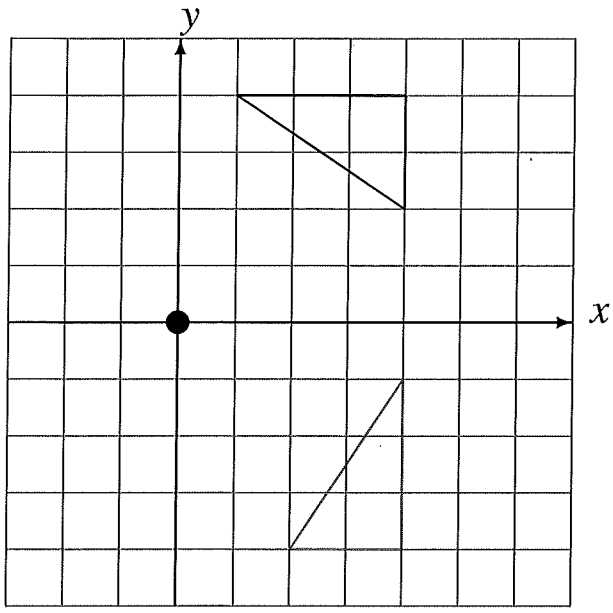
Translate by (-3, 2).



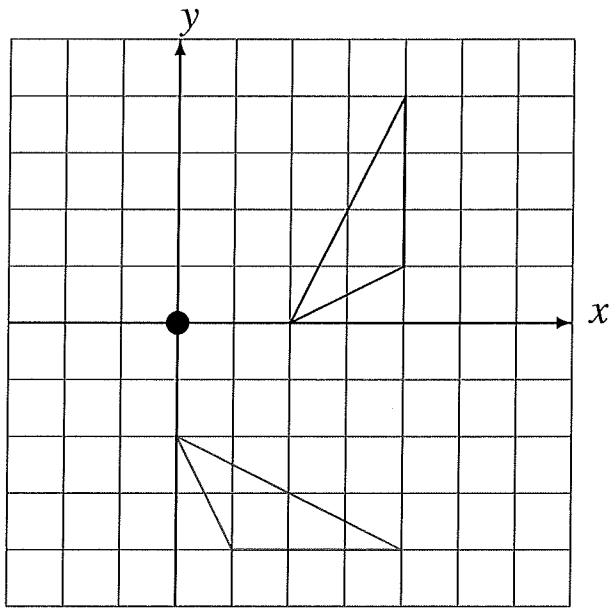
Rotations (A) Answers

Draw the rotated image.

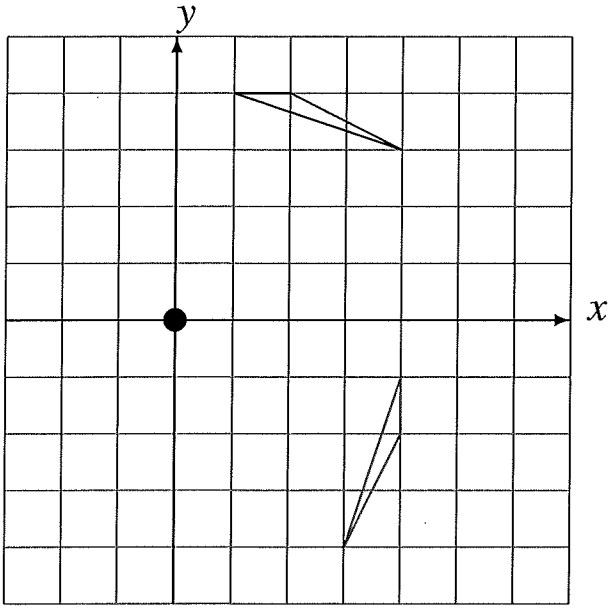
Rotate 90° clockwise about (0, 0).



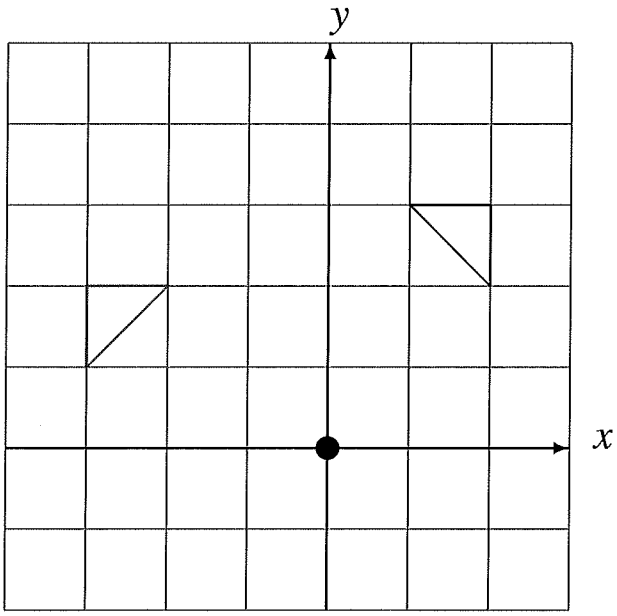
Rotate 90° clockwise about (0, 0).



Rotate 90° clockwise about (0, 0).



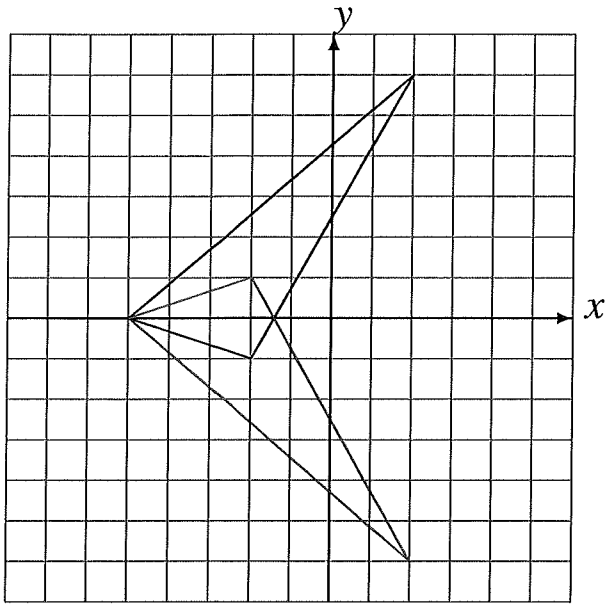
Rotate 90° counterclockwise about (0, 0).



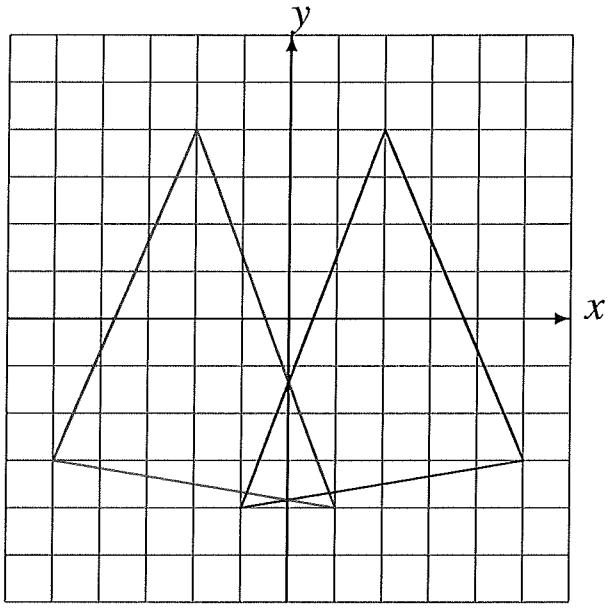
Reflections (A) Answers

Draw each reflected image.

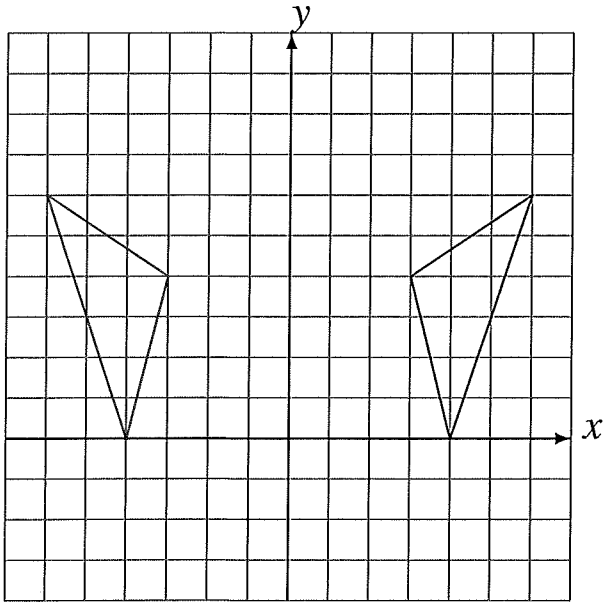
Reflect over y = 0.



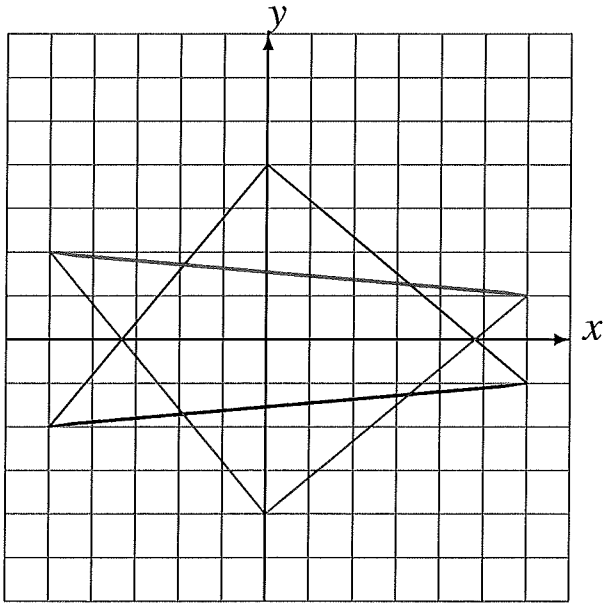
Reflect over x = 0.



Reflect over x = 0.



Reflect over y = 0.

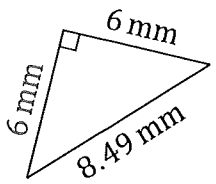


Pythagorean Theorem (A) Answers

Name: _____ Date: _____

Calculate the missing side measurement using $a^2 + b^2 = c^2$.

1.

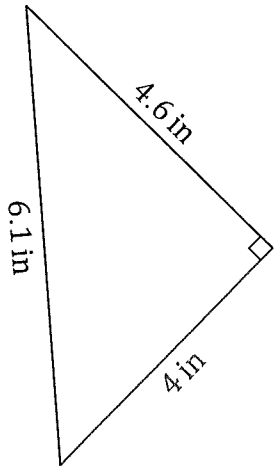


$a^2 + 6^2 = 8.49^2$

$a = \sqrt{72.0801 - 36}$

$a = 6\text{ mm}$

2.

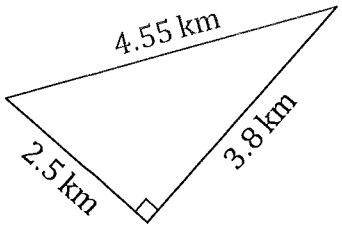


$4.6^2 + b^2 = 6.1^2$

$b = \sqrt{37.21 - 21.16}$

$b = 4\text{ in}$

3.

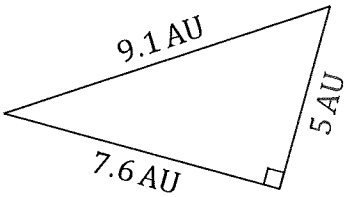


$3.8^2 + 2.5^2 = c^2$

$c = \sqrt{14.44 + 6.25}$

$c = 4.55\text{ km}$

4.

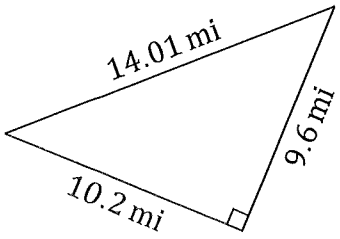


$a^2 + 7.6^2 = 9.1^2$

$a = \sqrt{82.81 - 57.76}$

$a = 5\text{ AU}$

5.

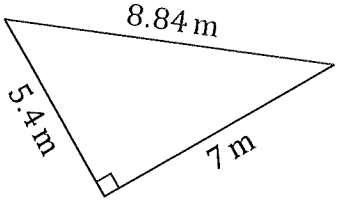


$9.6^2 + b^2 = 14.01^2$

$b = \sqrt{196.2801 - 92.16}$

$b = 10.2\text{ mi}$

6.



$7^2 + 5.4^2 = c^2$

$c = \sqrt{49 + 29.16}$

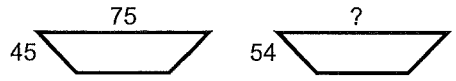
$c = 8.84\text{ m}$

Name : _____ Score : _____

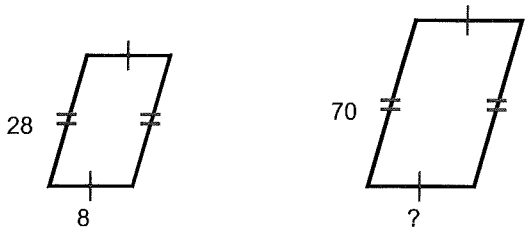
Teacher : _____ Date : _____

Using Similar Polygons

Each polygon pair is similar. Find the missing side length.

1) 

90

2) 

20

3) 

60

4) 

Scale Factor of Left to Right: 4 : 5 25

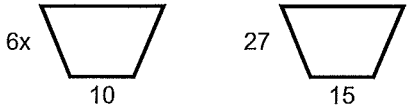
Given each polygon pair is similar, find x.

5) 

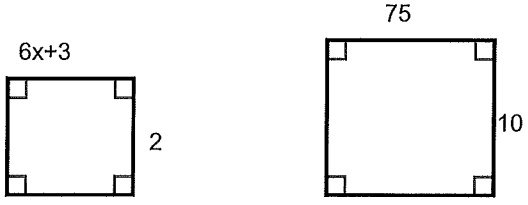
Scale Factor of Left to Right: 1 : 4 1

6) 

Scale Factor of Left to Right: 3 : 5 5

7) 

3

8) 

2