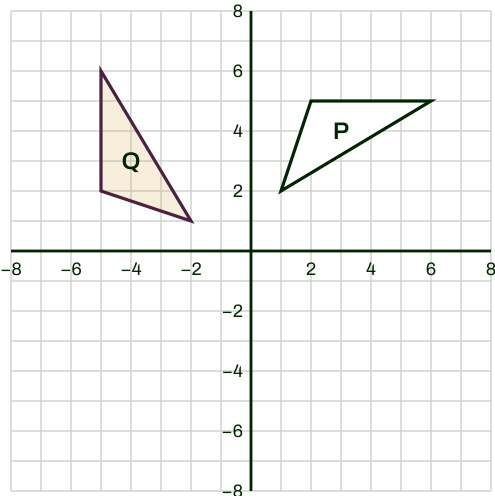


State what a rigid motion preserves

NAME	DATE	SCORE
		/ 10

1

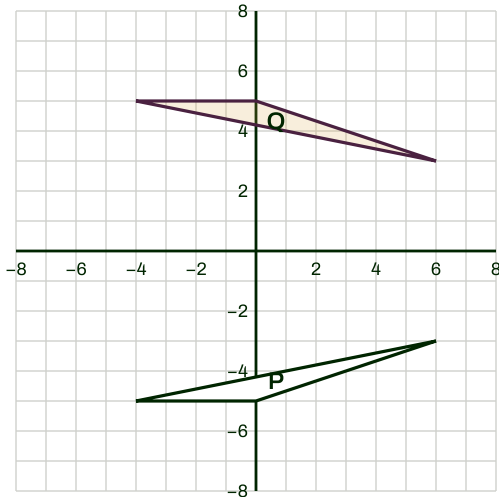
Triangle P was rotated 90° counterclockwise about the origin to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths and angle sizes stay the same; position changes
- ☐ Angle sizes stay the same; side lengths and position change
- ☐ Side lengths, angle sizes and position all stay the same
- ☐ Side lengths stay the same; angle sizes and position change

2

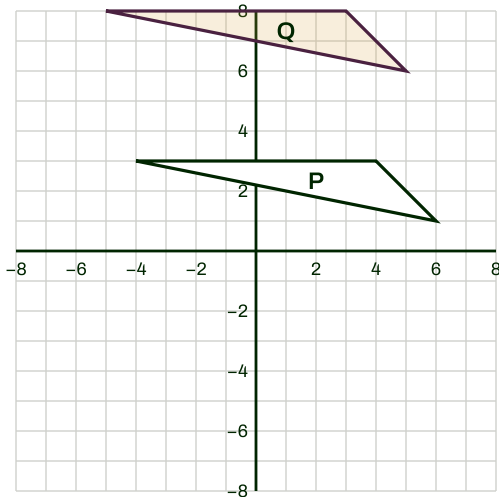
Triangle P was reflected across the x-axis to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths, angle sizes and orientation stay the same; position changes
- ☐ Side lengths and angle sizes stay the same; orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same

3

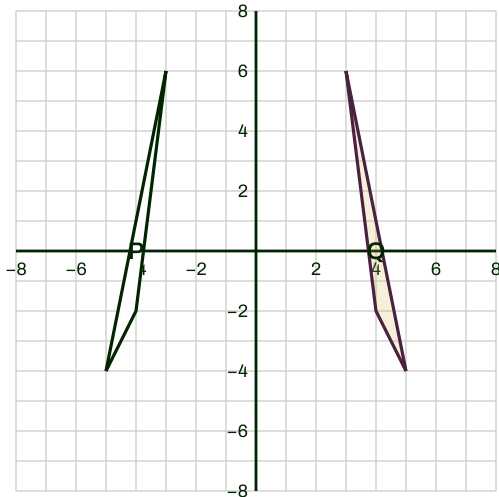
Triangle P was translated 1 left and 5 up to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths and angle sizes stay the same; orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths, angle sizes and orientation stay the same; position changes

4

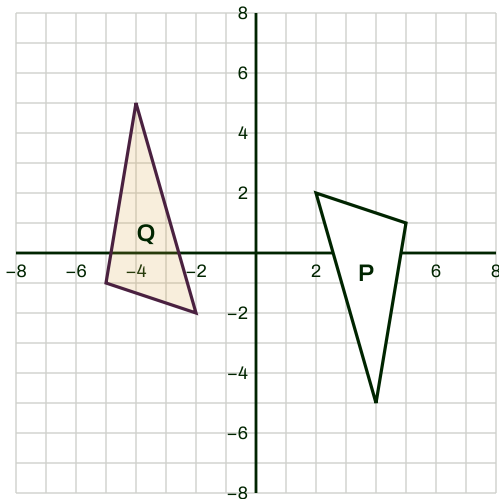
Triangle P was reflected across the y-axis to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths and angle sizes stay the same; orientation and position change
- ☐ Side lengths, angle sizes and orientation stay the same; position changes

5

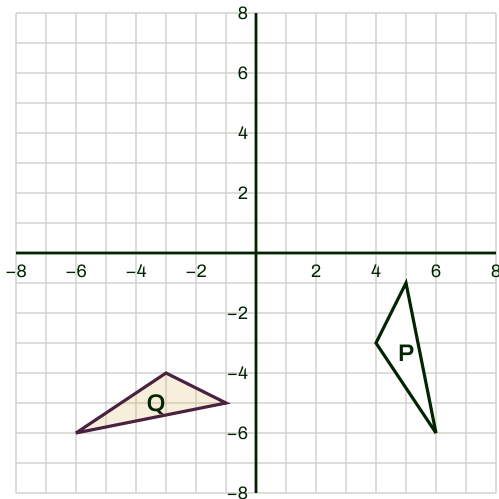
Triangle P was rotated 180° about the origin to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Angle sizes stay the same; side lengths and position change
- ☐ Side lengths stay the same; angle sizes and position change
- ☐ Side lengths and angle sizes stay the same; position changes
- ☐ Side lengths, angle sizes and position all stay the same

6

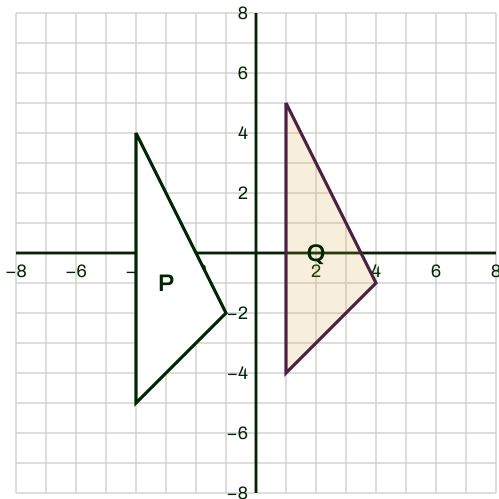
Triangle P was rotated 90° clockwise about the origin to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Angle sizes stay the same; side lengths and position change
- ☐ Side lengths stay the same; angle sizes and position change
- ☐ Side lengths and angle sizes stay the same; position changes
- ☐ Side lengths, angle sizes and position all stay the same

7

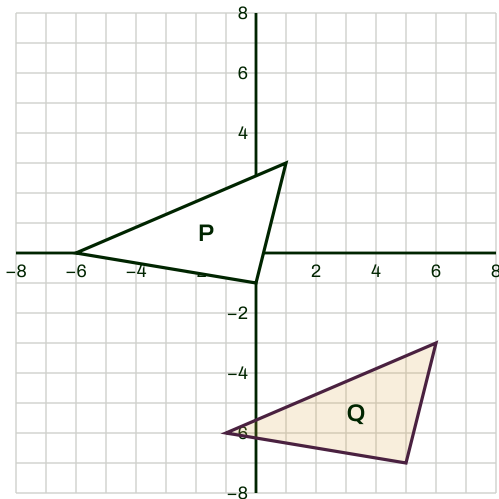
Triangle P was translated 5 right and 1 up to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths and angle sizes stay the same; orientation and position change
- ☐ Side lengths, angle sizes and orientation stay the same; position changes
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths stay the same; angle sizes, orientation and position change

8

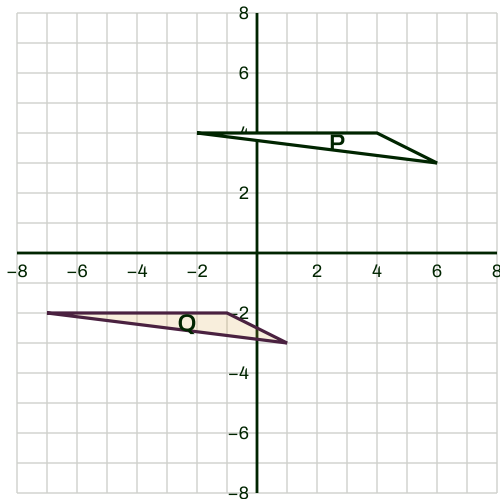
Triangle P was translated 5 right and 6 down to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths, angle sizes and orientation stay the same; position changes
- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths and angle sizes stay the same; orientation and position change

9

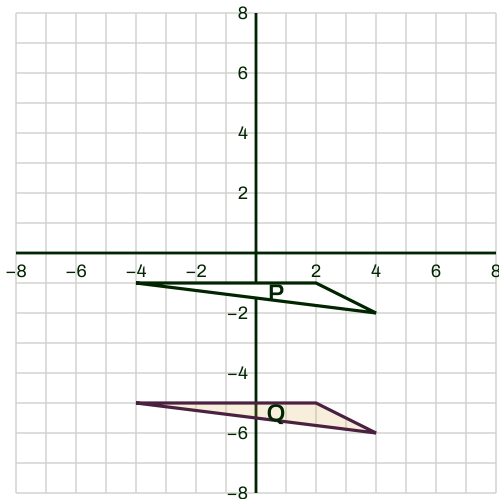
Triangle P was translated 5 left and 6 down to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths, angle sizes and orientation stay the same; position changes
- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths and angle sizes stay the same; orientation and position change

10

Triangle P was translated 4 down to make triangle Q, as shown on the coordinate plane below. Which statement about triangles P and Q is true?



- ☐ Side lengths and angle sizes stay the same; orientation and position change
- ☐ Side lengths stay the same; angle sizes, orientation and position change
- ☐ Side lengths, angle sizes, orientation and position all stay the same
- ☐ Side lengths, angle sizes and orientation stay the same; position changes

State what a rigid motion preserves

1 Side lengths and angle sizes stay the same; position changes

2 Side lengths and angle sizes stay the same; orientation and position change

3 Side lengths, angle sizes and orientation stay the same; position changes

4 Side lengths and angle sizes stay the same; orientation and position change

5 Side lengths and angle sizes stay the same; position changes

6 Side lengths and angle sizes stay the same; position changes

7 Side lengths, angle sizes and orientation stay the same; position changes

8 Side lengths, angle sizes and orientation stay the same; position changes

9 Side lengths, angle sizes and orientation stay the same; position changes

10 Side lengths, angle sizes and orientation stay the same; position changes
