

Part A:

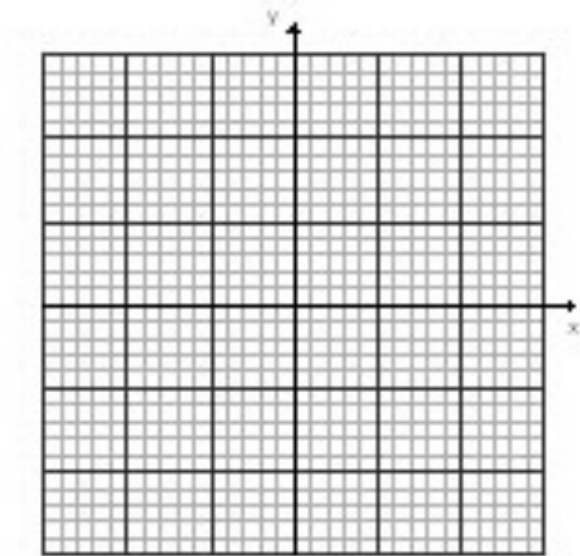
Triangle ABC is formed by the points
A (-7, 12) B (-5, -10) C(4, 2)

1. Draw your triangle on the graph to the right
2. Use the distance formula to find the triangle's three side lengths

AB:

BC:

AC:



3. In a different color, reflect ABC over the x axis to draw triangle XYZ.
4. What are the new coordinates of the triangle:

X: Y: Z:

5. Use the distance formula to find the triangle's three side lengths:

XY:

YZ:

XZ:

6. Are the side lengths the same after the triangle is reflected?

Part B:

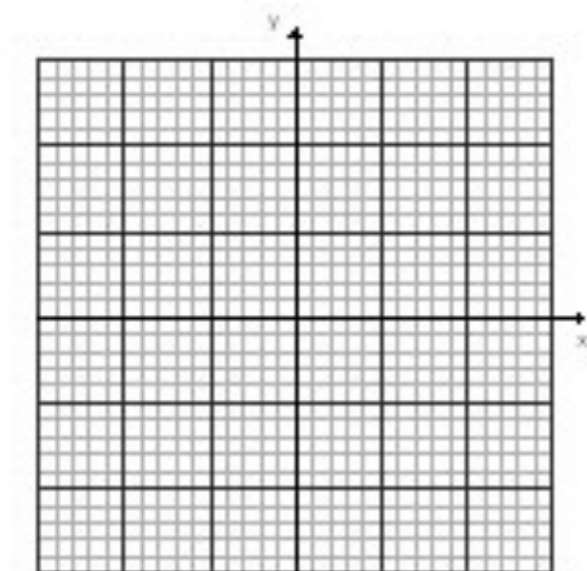
Triangle ABC is formed by the points
A (8, 4) B (5, -2) C(-3, -10)

1. Draw your triangle on the graph to the right
2. Use the distance formula to find the triangle's three side lengths

AB

BC

AC



3. In a different color, rotate ABC 90 degrees clockwise to draw triangle XYZ.

4. What are the new coordinates of the triangle:

X: Y: Z:

5. Use the distance formula to find the triangle's three side lengths:

XY

YZ

XZ

6. Are the side lengths the same after the triangle is rotated?

Part C:

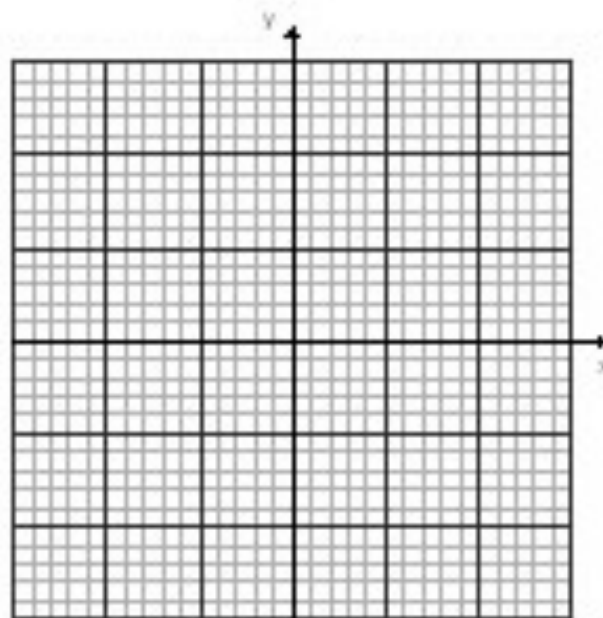
Triangle ABC is formed by the points
A (0, -5) B (7, 7) C(-9, 13)

1. Draw your triangle on the graph to the right
2. Use the distance formula to find the triangle's three side lengths

AB:

BC:

AC:



3. In a different color, slide ABC 2 units left and 5 units down to draw triangle XYZ.
4. What are the new coordinates of the triangle:

X: Y: Z:

5. Use the distance formula to find the triangle's three side lengths:

XY:

YZ:

XZ:

6. Are the side lengths the same after the triangle is translated?