## Cartesian Plane

Draw a different shape in each quadrant in the grid below. Write the coordinates for each shape.


## Pythagorean Theorem

The hypotenuse of a right triangle is the side that is opposite the right angle, or the "long side" of the triangle. The other two sides are the "legs" of the triangle.

The theory is $a^{2}+b^{2}=c^{2}$ ( $c^{2}$ is the hypotenuse)
Find the hypotenuse for the following triangles below.
a)


$$
b=3
$$

b)


$$
b=3
$$

c)

d)

$b=6$
e)
$a=3$

f)

$b=2$
g)


i)
$a=4$

$b=9$
a) Label the shape of each tangram piece.

| A |  |
| :--- | :--- |
| B |  |
| C |  |
| D |  |
| E |  |
| F |  |
| G |  |


b) Cut apart the seven tangram pieces. Use two or more pieces to create the following shapes. Indicate the individual shapes/pieces used to create each shape.

| Trapezoid |  |
| :---: | :--- |
| Parallelogram |  |
| Rectangle |  |
| Square |  |
| Triangle |  |

