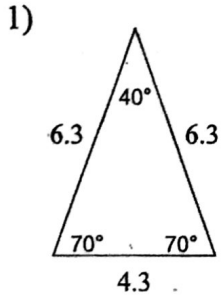
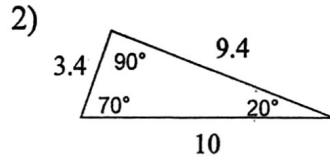


G6 C Level Test Review

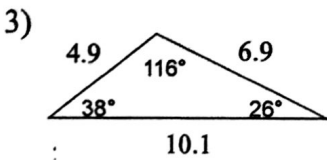
Classify each triangle by its angles and sides.



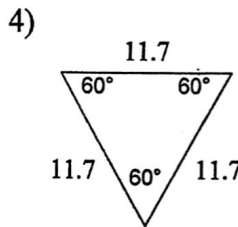
acute
isosceles



right scalene

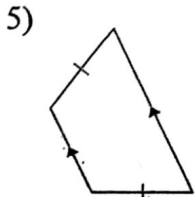


obtuse scalene

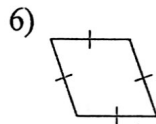


equilateral

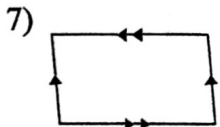
State the most specific name for each figure.



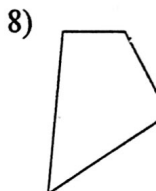
isosceles
trapezoid



rhombus



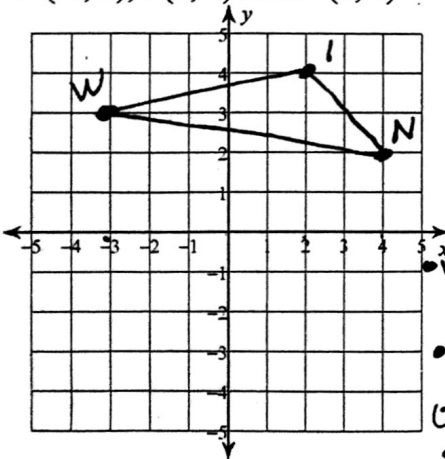
parallelogram



quadrilateral

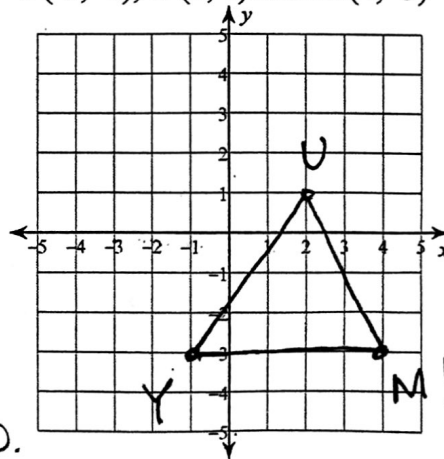
Plot and connect each point. Then state what kind of triangle it is and justify your conclusion.

9) W (-3, 3), I (2, 4) and N (4, 2)



obtuse
scalene
• no same sides.
• no \perp lines
• one angle greater than 90° .

10) Y (-1, -3), U (2, 1) and M (4, -3)



acute
isosceles.
 $\overline{YU} = \sqrt{3^2 + 4^2}$
 $\overline{YU} = 5$
 $\overline{YM} = 5$

1. For these point: A(5, 6), P(3, 0), Q(-4, 9)

a. Find midpoint of each segment below:

$$\overline{AP}: d = \sqrt{2^2 + 6^2}$$

$$d = \sqrt{4 + 36} = \sqrt{40}$$

$$\overline{AP} = \sqrt{40} \approx 6.32$$

$$\overline{AQ}: = \sqrt{3^2 + 9^2}$$

$$\overline{AQ} = \sqrt{9 + 81} = \sqrt{90} \approx 9.49$$

b. Plot points A, P, Q on the coordinate grid below to form $\triangle APQ$.

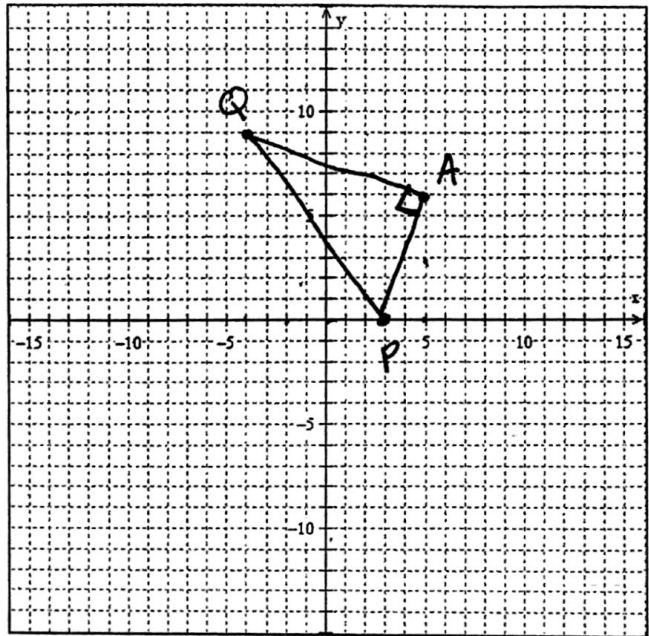
c. Use slope to show that angle A is a right angle. (hint: Find the slopes of

\overline{AP} and \overline{AQ} . Are the slopes negative reciprocals?)

$$m_{QA} = \frac{-3}{9} = -\frac{1}{3}$$

$$AP: m = \frac{-6}{-2} = \frac{6}{2} = 3$$

QA's slope to PA's slope are negative reciprocals. so they are \perp .



d. Find the perimeter of $\triangle APQ$

(Find the length of \overline{AP} , \overline{AQ} , and \overline{PQ} .)

e. Find the area of $\triangle APQ$

$$QP = \sqrt{7^2 + 9^2} = \sqrt{49 + 81} = \sqrt{130} \approx 11.40$$

$$AQ + AP + QP = 6.32 + 9.49 + 11.40$$

$$\text{perimeter} = 27.21$$

Area:

$$\frac{b \cdot h}{2} = \frac{6.32 \cdot 9.49}{2} = 15.81$$

e. Suppose line MN parallel to AP, what is the slope of line MN?

$$m_{AP} \text{ slope} = \frac{3}{1} \text{ or } 3$$

Line MN would also have a slope of 3.