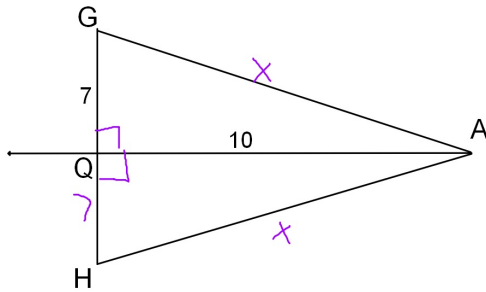


Bellwork Tuesday, February 4, 2014

1. Given $\overline{AQ}$ is the $\perp$ bisector of $\overline{GH}$ find the following.

- a. $\overline{GH}$ 14 b. $\overline{AG}$ 12.2 c. $\overline{AH}$ 12.2

Why is $\overline{QG} \cong \overline{QH}$?

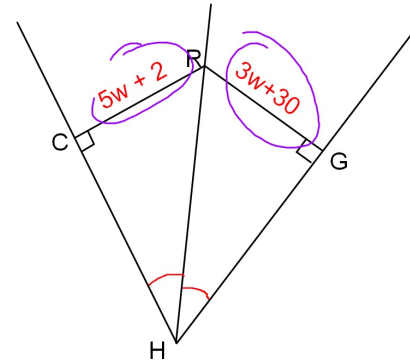


$$10^2 + 7^2 = h^2$$

$$\sqrt{149} = \sqrt{h^2}$$

$$12.2 = h$$

2. Find the value of w.



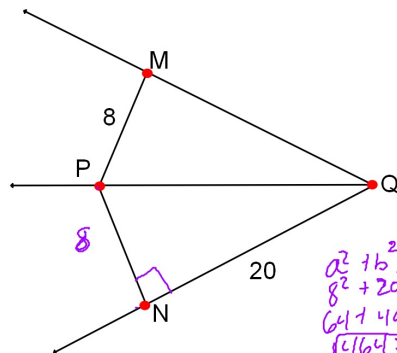
$$5w+2 = 3w+30$$

$$5w = 3w+28$$

$$-3 \quad -3$$

$$\frac{2w}{2} = \frac{28}{2} \quad w=14$$

3. $\overline{QP}$ bisects $\angle MQN$. Find the length of $\overline{PQ}$



$$8^2 + 16^2 = c^2$$

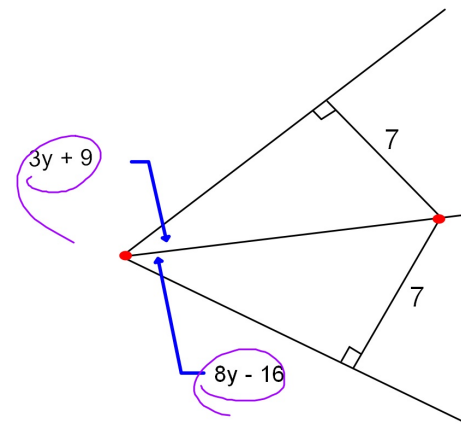
$$8^2 + 20^2 = c^2$$

$$64 + 400 = c^2$$

$$\sqrt{464} = \sqrt{c^2}$$

$$21.5$$

4. Find the value of y.



$$3y+9 = 8y-16$$

$$-9 \quad -9$$

$$3y = 8y-25$$

$$-8y \quad -8y$$

$$0 = 5y-25$$

$$\frac{5}{5} \quad \frac{5}{5}$$

$$y=5$$