



9) Given the sides of a triangle being  $8\sqrt{2}$ , 4 and 12 decide whether the triangle is right, acute or obtuse?

$$(8\sqrt{2})^2 = 128$$

$$4^2 = 16$$

$$12^2 = 144$$

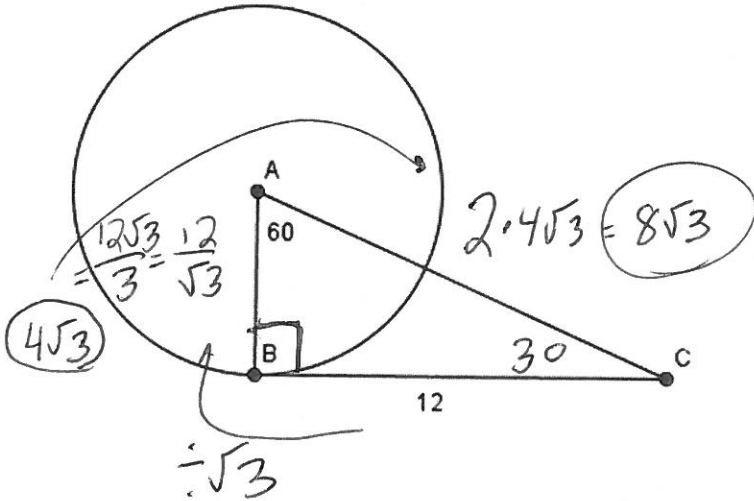
$$128 + 16 = 144$$

$$16 + 128 = 144$$

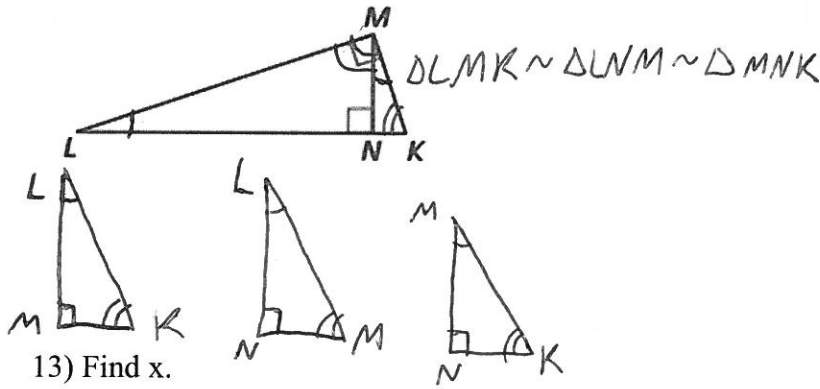
$$144 = 144$$

Right!

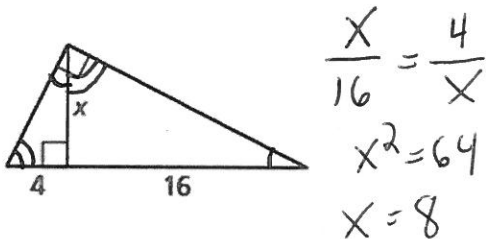
10) Find the length of the radius of circle A.



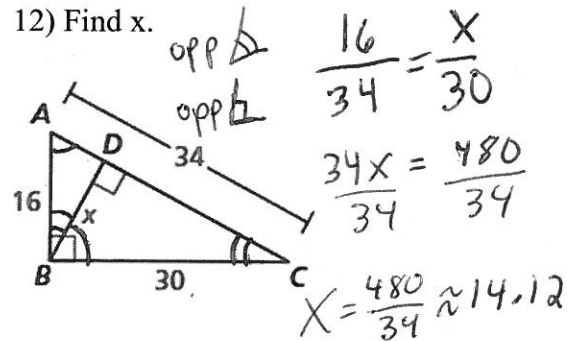
11) Find three similar triangles.



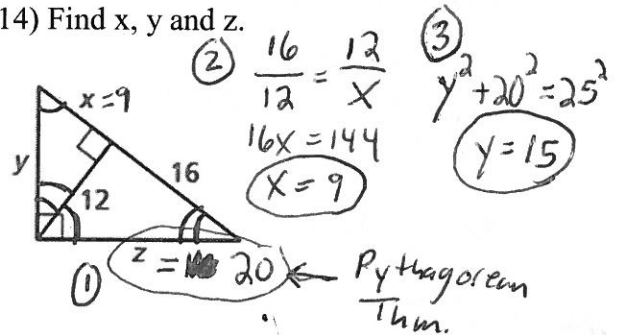
13) Find x.



12) Find x.



14) Find x, y and z.



15) Find the geometric mean of 14 and 20.

$$\sqrt{14 \cdot 20} = \sqrt{2 \cdot 7 \cdot 4 \cdot 5}$$

$$= \sqrt{4 \cdot 2 \cdot 7 \cdot 5}$$

$$= 2\sqrt{70}$$

16) Find the geometric mean of 24 and 45

$$\sqrt{24 \cdot 45} = \sqrt{2 \cdot 3 \cdot 4 \cdot 5 \cdot 9}$$

$$= \sqrt{9 \cdot 2 \cdot 3 \cdot 4 \cdot 5}$$

$$= 3\sqrt{120}$$