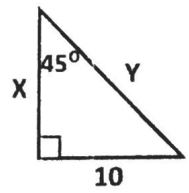
Missing Parts of Right Triangles Mixed Review **Geometry**

Directions: Find the values of x and y.

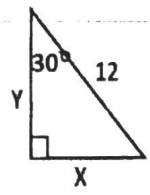
1)



$X = 10$

$Y = 10\sqrt{2}$

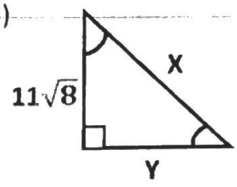
2)



$X = 6$

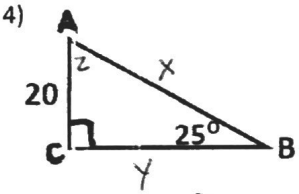
$Y = 6\sqrt{3}$

3)



Directions: Find each missing side & angle. Round each side to the nearest tenth & each angle to the nearest degree.

4)

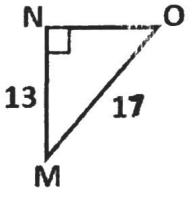


$Z = 65°$

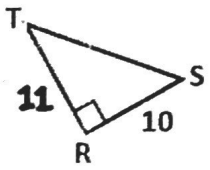
$X \approx 47.3$

$Y \approx 42.9$

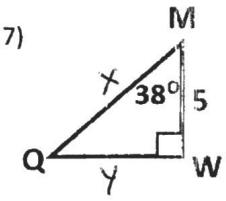
5)



6)



7)

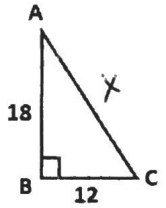


$\angle Q = 52°$

$X \approx 6.3$

$Y \approx 3.9$

8)

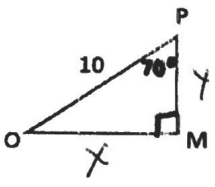


$\angle A \approx 34°$

$\angle C \approx 56°$

$X \approx 21.6$

9)



$\angle O = 20°$

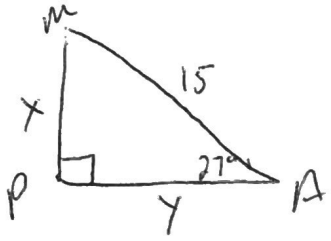
$X \approx 9.4$

$Y \approx 3.4$

Directions: Sketch the figure and then find the missing parts.

10) Points F, G, & H are the vertices of a triangle. F is a right angle. GH = 12 and FG = 4.

11) Points M, A, and P are the vertices of a right triangle. MA is the hypotenuse, and it is 15 units long. Angle A is 27°.



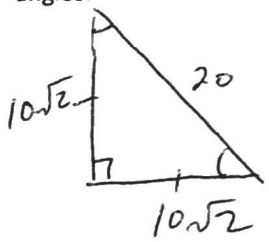
$\angle M = 63°$

$x \approx 6.8$

$y \approx 13.4$

12) Points R, E, and M are points on a right triangle. The legs RE and EM both measure 18 units.

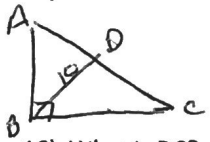
13) In a right triangle, there are two congruent angles. The hypotenuse measures 20 units. Y and X are complementary angles.



Both angles are 90°

Draw a picture and answer each question:
Given: ΔABC is an isosceles right triangle; m∠B = 90°; $\overline{BD}$ bisects ∠ABC; BD = 10

14) What is BC?



$10\sqrt{2}$

15) What is AB?

$10\sqrt{2}$

16) What is DC?

10

17) What is the perimeter of ΔABC?

$10\sqrt{2} + 10\sqrt{2} + 20 =$

$20\sqrt{2} + 20$