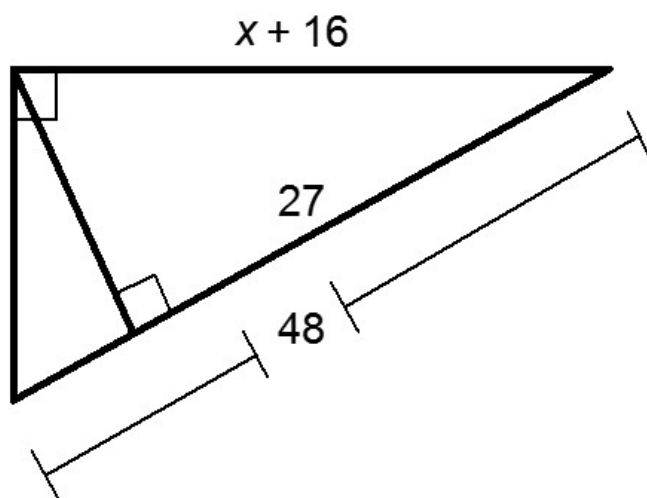


Assignments

- * Applications of Right Triangles worksheet (30 points)
- * Chapter Review worksheet (36 points)

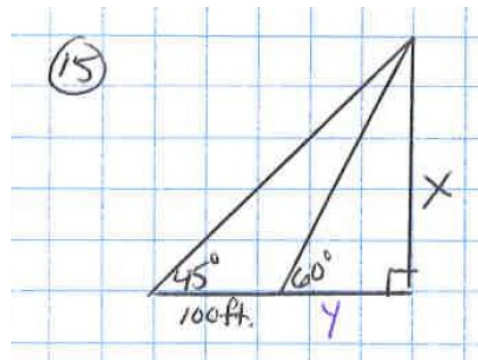
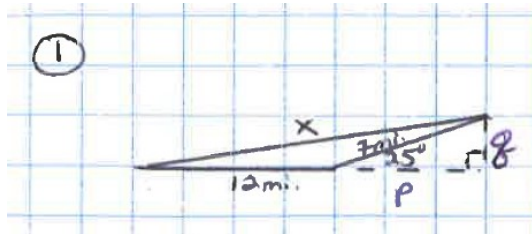
Warm-ups

Find the value of x .



From the top of a lighthouse 210 feet high, the angle of depression to a boat is 27° . Find the distance from the boat to the foot of the lighthouse. The lighthouse was built at sea level.

Applications Worksheet:



$$\begin{array}{cc} \underline{45^\circ-45^\circ-90^\circ} & \underline{30^\circ-60^\circ-90^\circ} \\ X = Y + 100 & X = Y\sqrt{3} \end{array}$$

$$\begin{aligned} Y\sqrt{3} &= Y + 100 \\ (Y\sqrt{3})^2 &= (Y + 100)^2 \\ 3Y^2 &= Y^2 + 200Y + 10000 \\ 2Y^2 - 200Y - 10000 &= 0 \\ Y^2 - 100Y - 5000 &= 0 \end{aligned}$$

$$Y = \frac{-(-100) \pm \sqrt{(-100)^2 - 4(1)(-5000)}}{2(1)}$$

Assignments

- * Applications of Right Triangles worksheet (30 points)
- * Chapter Review worksheet (36 points)
- * 9.6 Extra Practice worksheet (20 points)
- * IXL: Geometry - P2, P3, P4, P7, P10, P-New, Q1