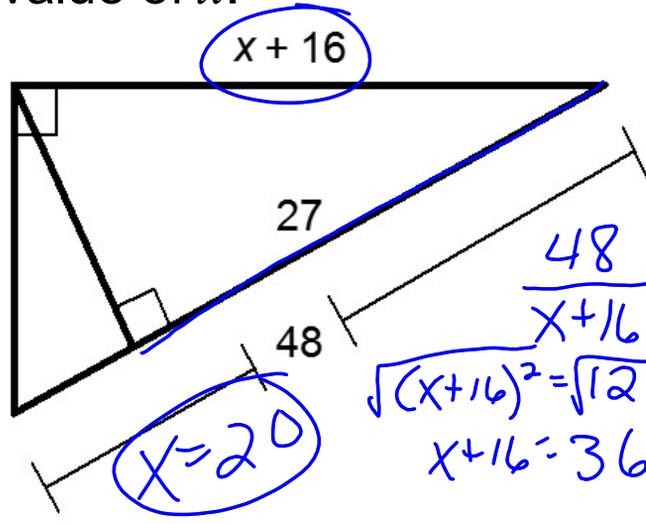
Assignments

* Applications of Right Triangles worksheet *(30 points - **FOLLOW DIRECTIONS!**)* Fri. 4/24
* Chapter Review worksheet *(36 points)* Fri. 4/24

Warm-ups

Find the value of x.



$\frac{\#}{\text{A}} = \frac{\text{A}}{\text{big \#}}$

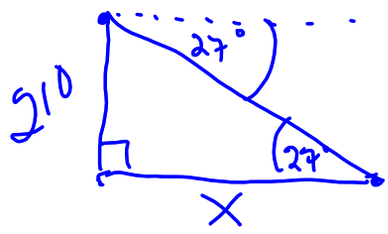
$\frac{48}{x+16} = \frac{x+16}{27}$

$\sqrt{(x+16)^2} = \sqrt{1296}$

$x+16 = 36$

$x = 20$

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.

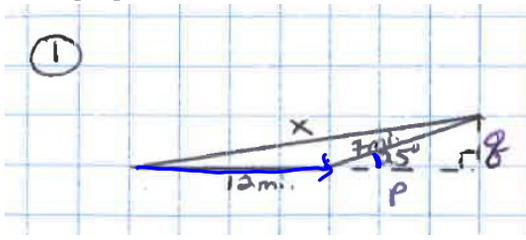


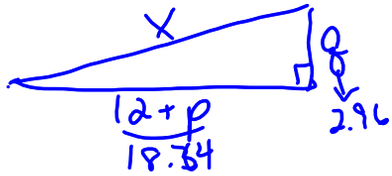
$\tan 27° = \frac{210}{X}$

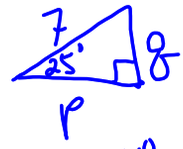
$X = \frac{210}{\tan 27°}$

$X = 412.1$ ft.

Applications Worksheet:







$\cos 25° = \frac{P}{7}$ $\sin 25° = \frac{Q}{7}$

$P = 7 \cdot \cos 25°$ $Q = 7 \cdot \sin 25°$

$P = 6.34$ $Q = 2.96$

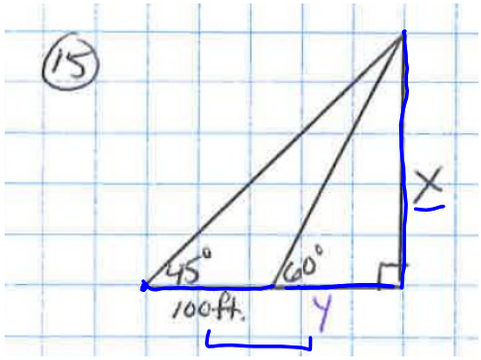
$18.34^2 + 2.96^2 = X^2$

$336.3556 + 8.7616 = X^2$

$X^2 = 345.1172$

$X = 18.6$ miles

(15)



$45°-45°-90°$ $30°-60°-90°$

$x = y + 100$ $x = y\sqrt{3}$

$y = 100 - x$ $x = (100 - x)\sqrt{3}$

$x = 100\sqrt{3} - \sqrt{3}x$

$1x + \sqrt{3}x = 100\sqrt{3}$

$x(1 + \sqrt{3}) = 100\sqrt{3}$

$x = \frac{100\sqrt{3}}{(1+\sqrt{3})}$

$x \approx 236.6$ ft.

Assignments - in One Note

* Applications of Right Triangles worksheet *(30 points)*
* Chapter Review worksheet *(36 points)*
* **9.6 Extra Practice worksheet *(20 points)***