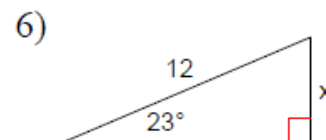
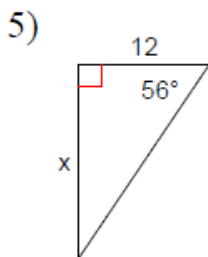
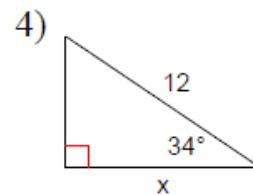
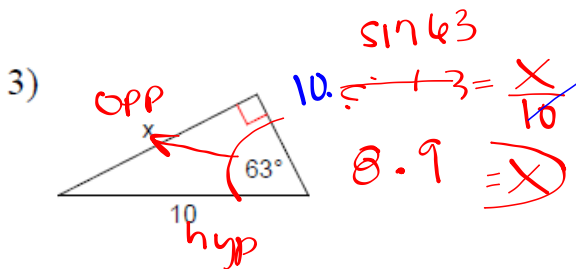
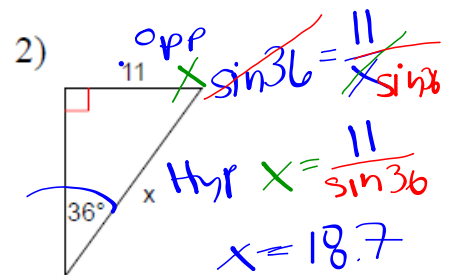
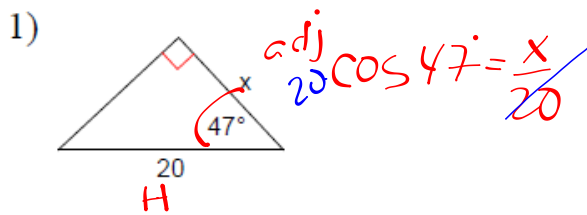


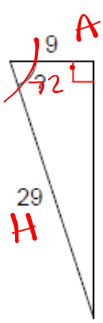
### 5.1 Worksheet RIGHT TRIANGLES

TRIG: ~~SOH~~ ~~CAH~~ ~~TOA~~: Find the missing side. Round to the nearest tenth.



TRIG: SOH CAH TOA: Find the measure of the indicated angle to the nearest degree.

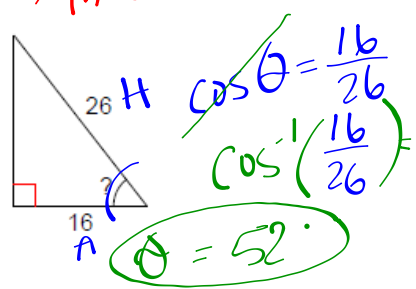
7)



$$\cos \theta = \frac{9}{29}$$

$$\theta = \cos^{-1}\left(\frac{9}{29}\right) = 72^\circ$$

8)



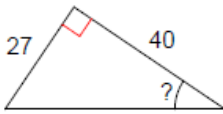
*inverse!*

$$\cos \theta = \frac{16}{26}$$

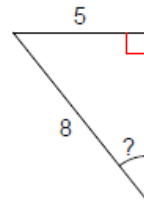
$$\theta = \cos^{-1}\left(\frac{16}{26}\right)$$

$$\theta = 52^\circ$$

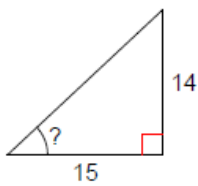
9)



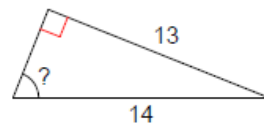
10)



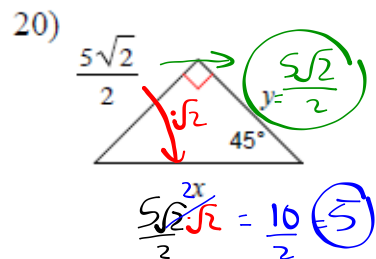
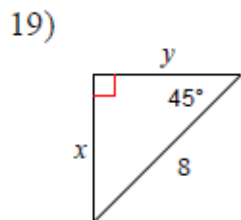
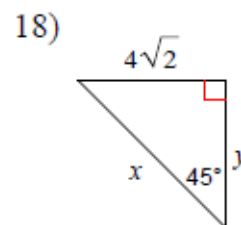
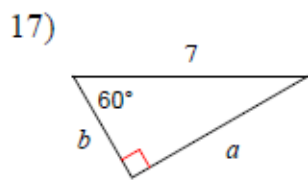
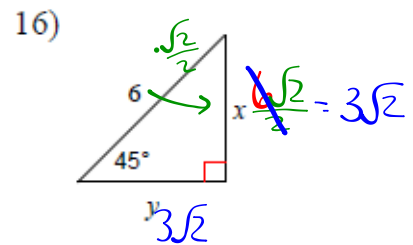
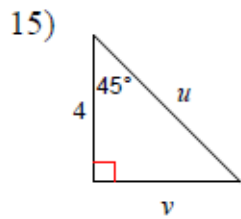
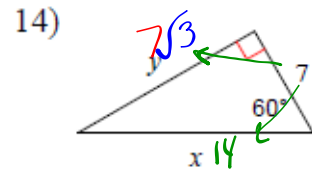
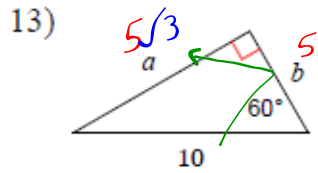
11)



12)

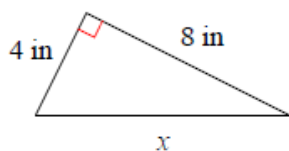


SPECIAL TRIANGLES: Find the missing side lengths. NO CALCULATOR

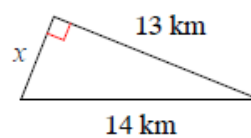


PYTHAGOREAN THEOREM: Find the missing side of each triangle. Leave your answers in simplest radical form. (NO DECIMALS)

21)



22)



$$\begin{aligned}x^2 + 13^2 &= 14^2 \\x^2 + 169 &= 196 \\-169 & \quad -169 \\ \hline \sqrt{x^2} &= \sqrt{27} = \frac{9}{3} \quad \left(\frac{3}{3}\right) \\ x &= 3\sqrt{3}\end{aligned}$$