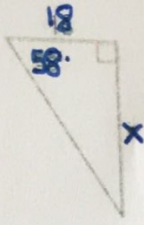
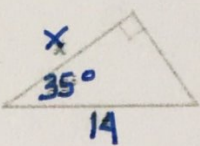


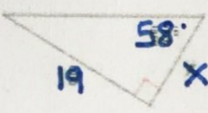
Name: \_\_\_\_\_

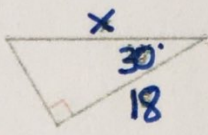
Right Triangles

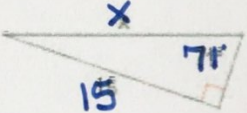
Find the missing side. Round to the nearest tenth.

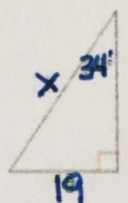
1)   $\tan 58^\circ = \frac{x}{18}$   
 $18 \tan 58^\circ = x$   
 $\underline{28.8 = x}$

2)   $\cos 35^\circ = \frac{x}{14}$   
 $14 \cos 35^\circ = x$   
 $\underline{11.5 = x}$

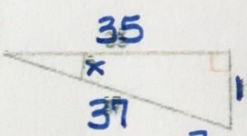
3)   $\tan 58^\circ = \frac{19}{x}$   
 $x \tan 58^\circ = 19$   
 $x = \frac{19}{\tan 58^\circ}$   
 $\underline{x = 11.9}$

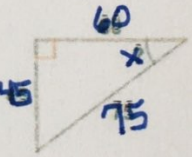
4)   $\cos 30^\circ = \frac{18}{x}$   
 $x \cos 30^\circ = 18$   
 $x = \frac{18}{\cos 30^\circ} = \underline{20.8}$

5)   $\sin 71^\circ = \frac{15}{x}$   
 $x \sin 71^\circ = 15$   
 $x = \frac{15}{\sin 71^\circ} = \underline{15.9}$

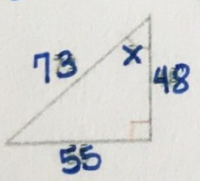
6)   $\sin 34^\circ = \frac{19}{x}$   
 $x = \frac{19}{\sin 34^\circ} = \underline{34.0}$

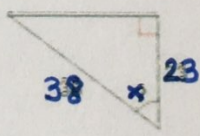
Find the measure of the indicated angle to the nearest degree.

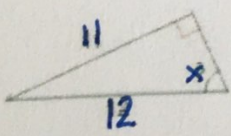
7)   $\tan x = \frac{12}{35}$   
 $\angle x = \tan^{-1}(\frac{12}{35}) = \underline{19^\circ}$   
 or  
 $\cos x = \frac{35}{37}$   
 $\angle x = \cos^{-1}(\frac{35}{37}) = \underline{19^\circ}$   
 or  
 $\sin x = \frac{12}{37}$   
 $\angle x = \sin^{-1}(\frac{12}{37}) = \underline{19^\circ}$

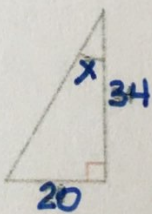
8)   $\sin x = \frac{45}{75}$   
 $\angle x = \sin^{-1}(\frac{45}{75})$   
 $= \underline{37^\circ}$

you can use either!

9)   $\tan x = \frac{55}{48}$   
 $\angle x = \tan^{-1}(\frac{55}{48})$   
 $\angle x = \underline{49^\circ}$

10)   $\cos x = \frac{23}{38}$   
 $\angle x = \cos^{-1}(\frac{23}{38})$   
 $\angle x = \underline{53^\circ}$

11)   $\sin x = \frac{11}{12}$   
 $\angle x = \sin^{-1}(\frac{11}{12})$   
 $\angle x = \underline{66^\circ}$

12)   $\tan x = \frac{20}{34}$   
 $\angle x = \tan^{-1}(\frac{20}{34})$   
 $\angle x = \underline{30^\circ}$