Summer Assignment - Triangle Trigonometry

We start the class immediately with triangle trigonometry. I assume that you know how to do problems like these, and we go from here. We will have a quiz during the first week of class. Find the value of the trig function indicated.

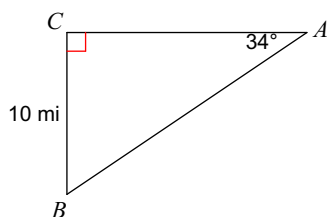1) Find $\tan \theta$ if $\cos \theta = \dfrac{12}{13}$

2) Find $\tan \theta$ if $\sin \theta = \dfrac{8}{17}$
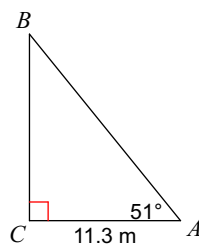
3) Find $\cos \theta$ if $\sin \theta = \dfrac{5}{13}$

4) Find $\cos \theta$ if $\sin \theta = \dfrac{4\sqrt{3}}{7}$
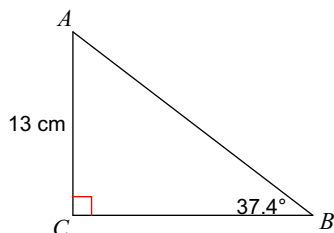
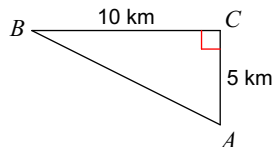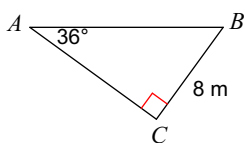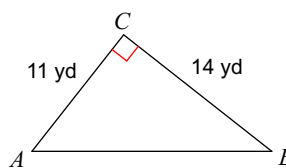**Solve each triangle. Round answers to the nearest tenth.**

5)

6)

7)

8)

9)

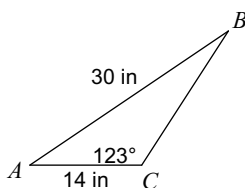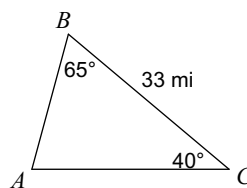10)

Solve each triangle. Round your answers to the nearest tenth.
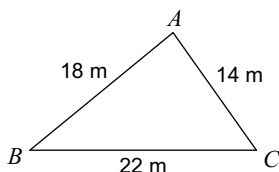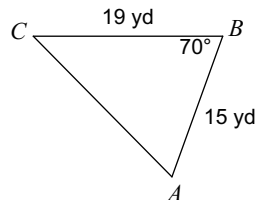
11)

12)

13)

14)

Answers to Summer Assignment - Triangle Trigonometry

1) $\dfrac{5}{12}$ 2) $\dfrac{8}{15}$ 3) $\dfrac{12}{13}$ 4) $\dfrac{1}{7}$

5) $m\angle B = 56°$, $b = 14.8$ mi, $c = 17.9$ mi

6) $m\angle B = 39°$, $a = 14$ m, $c = 18$ m

7) $m\angle A = 52.6°$, $a = 17$ cm, $c = 21.4$ cm

8) $m\angle B = 26.6°$, $m\angle A = 63.4°$, $c = 11.2$ km

9) $m\angle B = 54°$, $b = 11$ m, $c = 13.6$ m

10) $m\angle A = 51.8°$, $m\angle B = 38.2°$, $c = 17.8$ yd

11) $m\angle B = 23°$, $m\angle A = 34°$, $a = 20$ in

12) $m\angle A = 75°$, $c = 22$ mi, $b = 31$ mi

13) $m\angle B = 39.4°$, $m\angle C = 54.7°$, $m\angle A = 85.9°$

14) $m\angle C = 45.6°$, $m\angle A = 64.4°$, $b = 19.8$ yd