Right Triangle Trigonometry

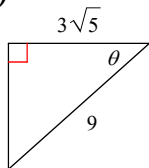**Find the value of each. Round your answers to the nearest ten-thousandth.**
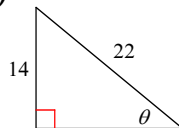
1) $\csc 23°$

2) $\tan \dfrac{5\pi}{36}$

Find the value of the trig function indicated.
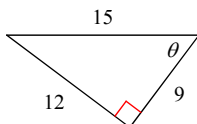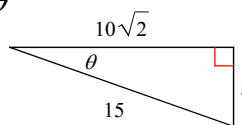
3) $\csc \theta$

4) $\tan \theta$

5) $\tan \theta$

6) $\sec \theta$

7) Find $\cot \theta$ if $\cos \theta = \dfrac{3}{13}$

8) Find $\cos \theta$ if $\sin \theta = \dfrac{4\sqrt{13}}{17}$

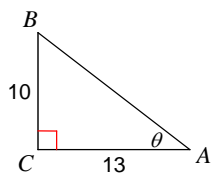9) Find $\sec \theta$ if $\cos \theta = \dfrac{\sqrt{2}}{10}$

10) Find $\sin \theta$ if $\sec \theta = \dfrac{5}{3}$

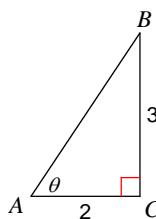11) Find $\tan \theta$ if $\csc \theta = \sqrt{10}$

12) Find $\cos \theta$ if $\sec \theta = \dfrac{5}{4}$

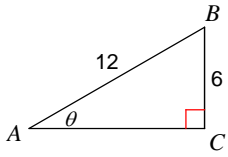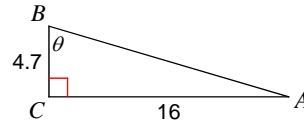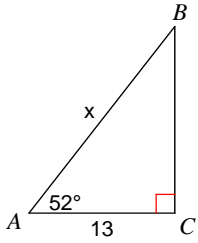**Find the measure of each angle indicated. Round to the nearest tenth.**

13)
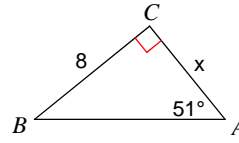

14)

15)

16)

Find the measure of each side indicated. Round to the nearest tenth.
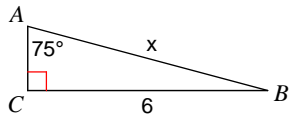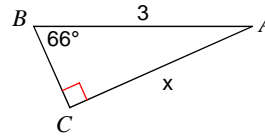
17)

18)

19)
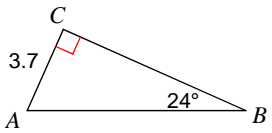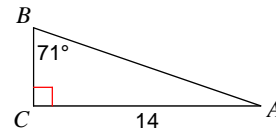

20)

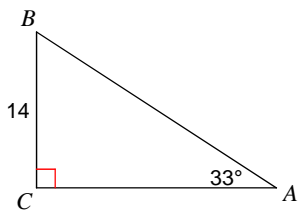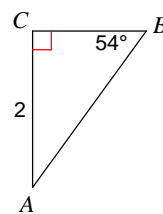**Solve each triangle. Round answers to the nearest tenth.**

21)

22)
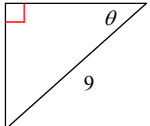

23)

24)

Right Triangle Trigonometry

Find the value of each. Round your answers to the nearest ten-thousandth.

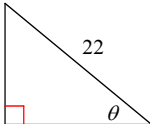1) csc 23°

   2.5593

2) $\tan \dfrac{5\pi}{36}$

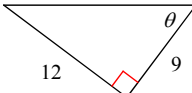   0.4663

Find the value of the trig function indicated.
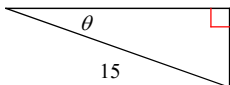
3) csc θ $\dfrac{3}{2}$

4) tan θ $\dfrac{7\sqrt{2}}{12}$

5) tan θ $\dfrac{4}{3}$

6) sec θ $\dfrac{3\sqrt{2}}{4}$

7) Find cot θ if cos $\theta = \dfrac{3}{13}$

   $\dfrac{3\sqrt{10}}{40}$

8) Find cos θ if sin $\theta = \dfrac{4\sqrt{13}}{17}$

   $\dfrac{9}{17}$

9) Find sec θ if cos $\theta = \dfrac{\sqrt{2}}{10}$

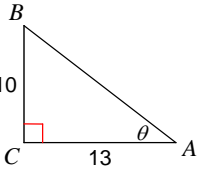 $5\sqrt{2}$

10) Find sin θ if sec $\theta = \dfrac{5}{3}$

   $\dfrac{4}{5}$

11) Find tan θ if csc $\theta = \sqrt{10}$

   $\dfrac{1}{3}$

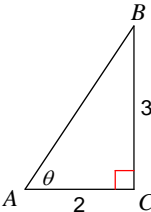12) Find cos θ if sec $\theta = \dfrac{5}{4}$

   $\dfrac{4}{5}$

Find the measure of each angle indicated. Round to the nearest tenth.
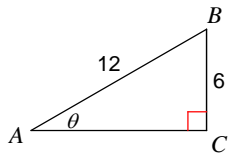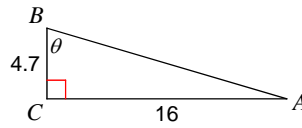
13)

   37.6°

14)

   56.3°
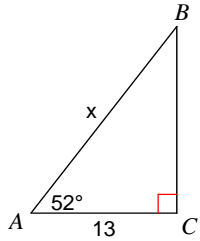
15)

12 / B / 6 / θ / A / C

30°

16)

B / θ / 4.7 / C / 16 / A

73.6°

Find the measure of each side indicated. Round to the nearest tenth.

17)

B / x / 52° / A / 13 / C

21.1

18)

C / 8 / x / B / 51° / A

6.5

19)

A / 75° / x / C / 6 / B

6.2

20)

B / 66° / 3 / A / x / C
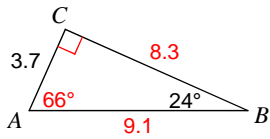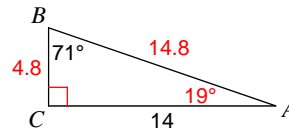
2.7

Solve each triangle. Round answers to the nearest tenth.

21)

C / 3.7 / 8.3 / 66° / 24° / A / 9.1 / B

22)

B / 71° / 14.8 / 4.8 / 19° / C / 14 / A

23)

B / 57° / 25.7 / 14 / 33° / C / 21.6 / A

24)

C / 1.5 / 54° / B / 2 / 36° / 2.5 / A