Secondary Math 2 Name_____ ID: 1

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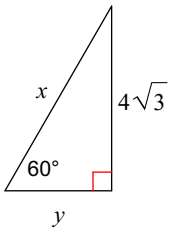
Review of 11.1-11.5 Trigonometry

Date_____ Period____

Find the missing side lengths. Leave your answers as radicals in simplest form.

1)



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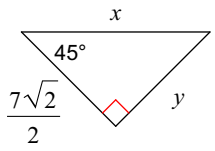

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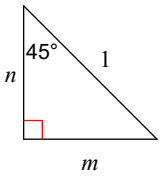

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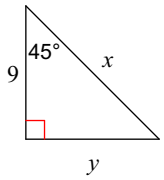

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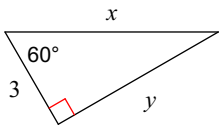

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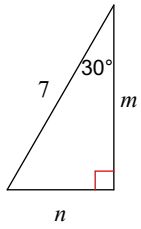
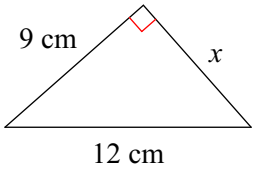


Find the missing side of each right triangle. Side *c* is the hypotenuse. Sides *a* and *b* are the legs. Leave your answers in simplest radical form and round to the nearest tenth.

7)



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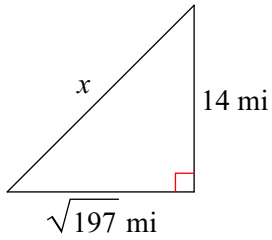

9) $a = 7$ ft, $b = 5$ ft

10) $b = 15$ yd, $c = 16$ yd

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Find the distance between each pair of points. Leave your answers in simlest radical form and round to the nearest tenth.

11) $(6, 2), (0, -1)$

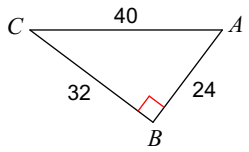
12) $(-7, -1), (8, -4)$

13) $(-7, 2), (-8, -1)$

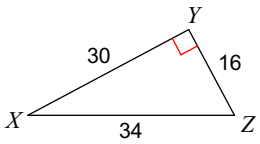
14) $(3, 8), (-3, -4)$

Find the value of each trigonometric ratio.

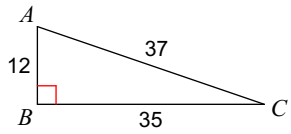
15) cos C



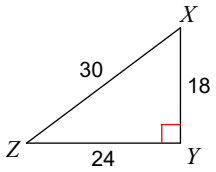
16) tan Z



17) cos C



18) sin Z



Find the value of each trigonometric ratio to the nearest ten-thousandth.

19) cos 50°

20) sin 75°

21) tan 17°

22) sin 15°

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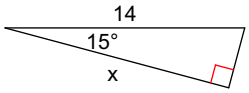
Find the missing side. Round to the nearest tenth.

23)



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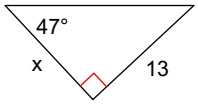

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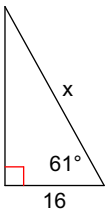

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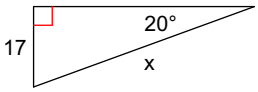

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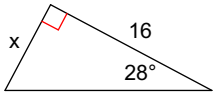

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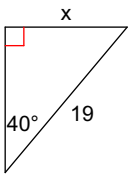

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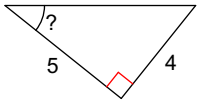
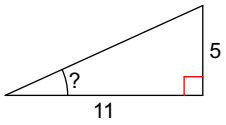
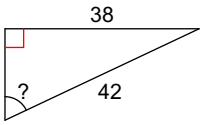
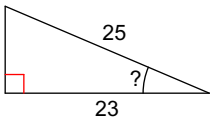
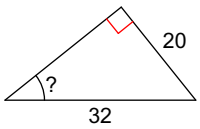
Find the measure of the indicated angle to the nearest degree.

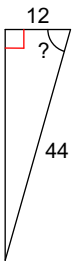
29) 

30) 

31) 

32) 

33) 

34) 

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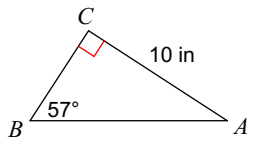
1) Draw and label a triangle to illustrate the situation. 2) Find the length of the missing side. 3) Give the values of the requested functions. 4) Give the measure of the angle to the nearest tenth of a degree.

35) Find $\sin\theta$ and $\cos\theta$ if $\tan\theta = \frac{4}{3}$

36) Find $\tan\theta$ and $\sin\theta$ if $\cos\theta = \frac{1}{7}$

Solve each triangle. Round answers to the nearest tenth.

37)



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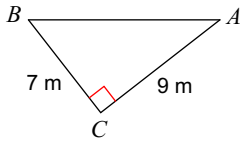

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Answers to Review of 11.1-11.5 Trigonometry (ID: 1)

1) $x = 8,\ y = 4$

2) $x = 7,\ y = \frac{7\sqrt{2}}{2}$

3) $m = \frac{\sqrt{2}}{2},\ n = \frac{\sqrt{2}}{2}$

4) $x = 9\sqrt{2},\ y = 9$

5) $x = 6,\ y = 3\sqrt{3}$

6) $m = \frac{7\sqrt{3}}{2},\ n = \frac{7}{2}$

7) $3\sqrt{7}$ cm

8) $\sqrt{393}$ mi

9) $\sqrt{74}$ ft

10) $\sqrt{31}$ yd

11) $3\sqrt{5}$

12) $3\sqrt{26}$

13) $\sqrt{10}$

14) $6\sqrt{5}$

15) $\frac{4}{5}$

16) $\frac{15}{8}$

17) $\frac{35}{37}$

18) $\frac{3}{5}$

19) 0.6428

20) 0.9659

21) 0.3057

22) 0.2588

23) 13.5

24) 12.1

25) 33.0

26) 49.7

27) 8.5

28) 12.2

29) 39°

30) 24°

31) 65°

32) 23°

33) 39°

34) 74°

35) $\frac{4}{5}$

36) $4\sqrt{3}$

37) $m\angle A = 33°,\ a = 6.5$ in, $c = 11.9$ in

38) $m\angle A = 37.9°,\ m\angle B = 52.1°,\ c = 11.4$ m

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