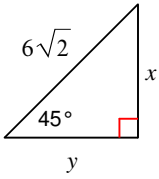


UNIT 2 Test STUDY GUIDE

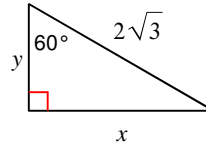
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Find the missing side lengths. Leave your answers as radicals in simplest form.

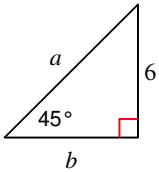
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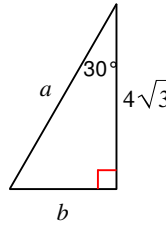
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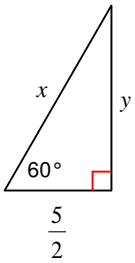
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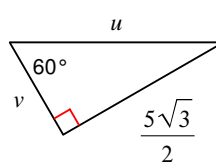
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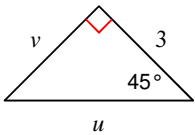
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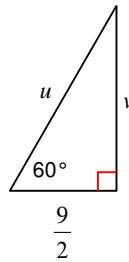
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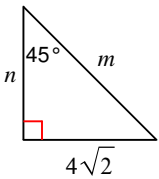
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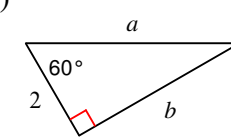
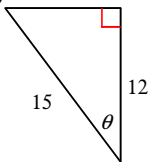
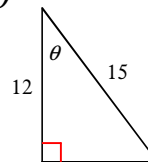
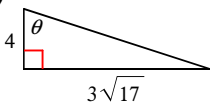
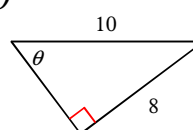
8)



9)



10)

**Find the value of the trig function indicated.**11) $\sin \theta$ 12) $\cos \theta$ 13) $\sin \theta$ 14) $\sin \theta$ 

15) Find $\cos \theta$ if $\tan \theta = \sqrt{3}$

16) Find $\cos \theta$ if $\tan \theta = \frac{3}{4}$

17) Find $\tan \theta$ if $\cos \theta = \frac{12}{13}$

18) Find $\cos \theta$ if $\sin \theta = \frac{3\sqrt{13}}{13}$

In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.

19) Find $\tan A$ if $b = 17$, $a = 7$

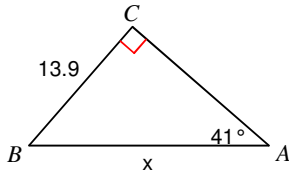
20) Find $\tan A$ if $b = 12$, $a = 3$

21) Find $\sin A$ if $b = 4$, $c = 5$

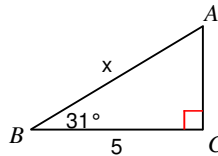
22) Find $\tan A$ if $a = 20$, $c = 25$

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

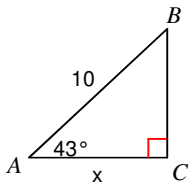
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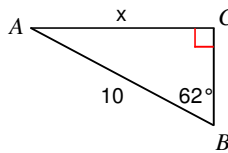
24)



25)



26)



In each problem, angle C is a right angle. Find the side indicated to the nearest tenth.

27) Find b if $a = 10.4$, $m\angle A = 53^\circ$

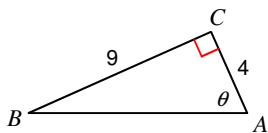
28) Find c if $a = 8$, $m\angle B = 38^\circ$

29) Find a if $m\angle A = 27^\circ$, $b = 8$

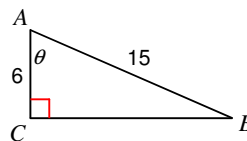
30) Find a if $m\angle A = 22^\circ$, $c = 3$

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

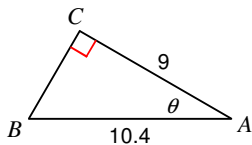
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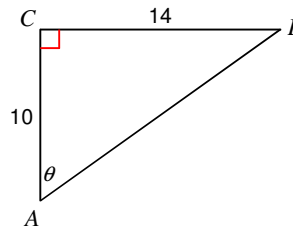
32)



33)



34)



In each problem, angle C is a right angle. Find the angle indicated to the nearest tenth.

35) Find $m\angle A$ if $b = 5$, $c = 16$

36) Find $m\angle A$ if $b = 13$, $a = 5.6$

37) Find $m\angle A$ if $c = 11.1$, $b = 4$

38) Find $m\angle A$ if $c = 5$, $a = 2$

Answers to UNIT 2 Test STUDY GUIDE (ID: 1)

1) $x = 6, y = 6$

2) $x = 3, y = \sqrt{3}$

3) $a = 6\sqrt{2}, b = 6$

4) $a = 8, b = 4$

5) $x = 5, y = \frac{5\sqrt{3}}{2}$

6) $u = 5, v = \frac{5}{2}$

7) $u = 3\sqrt{2}, v = 3$

8) $u = 9, v = \frac{9\sqrt{3}}{2}$

9) $m = 8, n = 4\sqrt{2}$

10) $a = 4, b = 2\sqrt{3}$

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

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

13) $\frac{3\sqrt{17}}{13}$

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

15) $\frac{1}{2}$

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

17) $\frac{5}{12}$

18) $\frac{2\sqrt{13}}{13}$

19) $\frac{7}{17}$

20) $\frac{1}{4}$

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

22) $\frac{4}{3}$

23) 21.2

24) 5.8

25) 7.3

26) 8.8

27) 7.8

28) 10.2

29) 4.1

30) 1.1

31) 66°

32) 66.4°

33) 30.1°

34) 54.5°

35) 71.8°

36) 23.3°

37) 68.9°

38) 23.6°