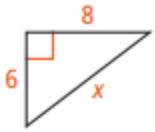
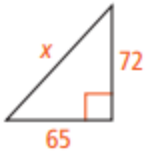
1. Find the value of x in the figure below.



A. 5
B. 10
C. 5.3
D. 14

---

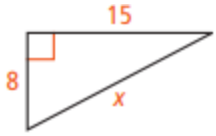
2. What is the value of x in the figure below?



A. 137
B. 9.8
C. 97
D. 31

---

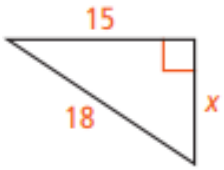
3. What is the value of x in the figure below?



A. 17
B. 23
C. 12.7
D. 529

---

4. What is the value of x in the figure below? Leave answer in simplest radical form.



A. $9\sqrt{11}$

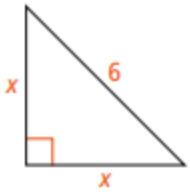
B. $3\sqrt{11}$

C. $9\sqrt{61}$

D. $3\sqrt{61}$

---

5. What is the value of *x* in the figure below? Leave answer in simplest radical form.



A. 6

B. $6\sqrt{2}$

C. $3\sqrt{2}$

D. $\sqrt{3}$

---

6. A triangle has side lengths of 4, 5, and 6. Which of the following correctly classifies this triangle.

A. acute
B. obtuse
C. right
D. isosceles

---

7. A triangle has side lengths of 0.3, 0.4, and 0.6. Which of the following correctly classifies this triangle?

A. acute
B. obtuse
C. right
D. these could not be side lengths in a triangle.

---

8. A triangle has side lengths of $\sqrt{11}, \sqrt{7}, 4$. Which of the following correctly classifies this triangle?

A. acute
B. obtuse
C. right
D. equilateral

---

9. Which of the following could be the third side an acute triangle with the other two side lengths of 5 and 10?

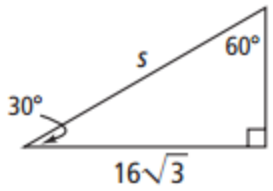
A. 7
B. 8
C. 11
D. 12

---

10. Which of the following could be the third side of an obtuse triangle with the other two side lengths of 6 and 7.

A. 5
B. 8
C. 9
D. 10

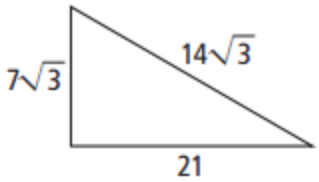
1. What is the value of *s* in the figure below?



A. 8
B. 16
C. $16\sqrt{2}$
D. 32

---

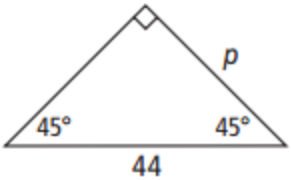
2. What are the angle measures of the triangle below?



A. 30°, 60°, and 90°
B. 60°, 60°, and 60°
C. 45°, 45°, and 90°
D. None of these.

---

3. What is the value of *p* in the figure below?



A. 22

B. $22\sqrt{2}$

C. 44

D. $44\sqrt{3}$

---

4. In the center of a town there is a square park with side lengths of 30 ft. If a person walks from one corner of the park to the opposite corner, how far does the person walk? Round to the nearest foot.

A. 21 ft.

B. 42 ft.

C. 52 ft.

D. 60 ft.

---

5. An equilateral triangle has an altitude of 15m. What is the perimeter of the triangle?

A. $30\sqrt{2}$ m

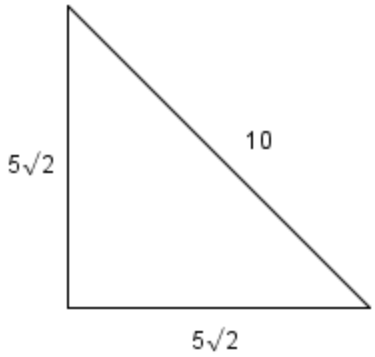
B. 45 m.

C. $30\sqrt{3}$ m

D. $60\sqrt{3}$ m

---

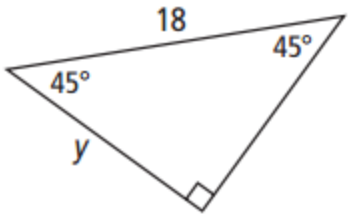
6. What are the angle measures in the triangle below?



A. 30°, 60°, and 90°
B. 60°, 60°, and 60°
C. 45°, 45°, and 90°
D. None of these.

---

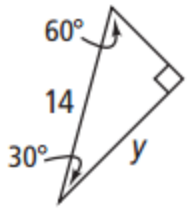
7. What is the value of *y* in the figure below?



A. 9
B. $9\sqrt{2}$
C. 18
D. $18\sqrt{2}$

---

8. What is the value of *y* in the figure below?



A. 14
B. 7
C. $7\sqrt{3}$
D. $14\sqrt{3}$

---

9. The side lengths of a triangle are 40, 50, and 80. What are the angle measures in the triangle?

A. 30°, 60°, and 90°
B. 60°, 60°, and 60°
C. 45°, 45°, and 90°
D. None of these.

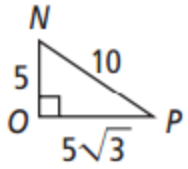
---

10. A professional baseball diamond is a square. The distance from base to base is 90 ft. How far does a catcher standing at home plate throw the ball across the diagonal of the square to second base?

A. 90 ft.
B. $90\sqrt{2}$
C. 180

D. $180\sqrt{2}$

1. What is the value of sin *N* in the figure below?



A. $\frac{1}{2}$

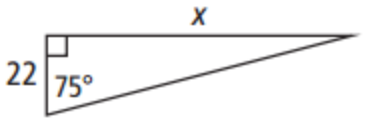
B. $\frac{\sqrt{3}}{3}$

C. $\frac{\sqrt{3}}{2}$

D. $\sqrt{3}$

---

2. What is the value of *x* in the figure below to the nearest tenth?



A. 5.7

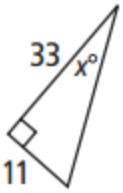
B. 21.3

C. 30.3

D. 82.1

---

3. What is the value of *x* in the figure below to the nearest degree?



A. 18
B. 19
C. 71
D. 72

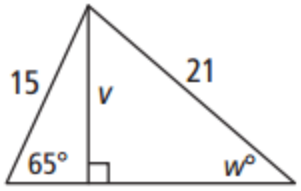
---

4. A 14-ft long ramp rises at an angle of 22.2 degrees. How long is the base of the ramp, to the nearest foot?

A. 11 ft.
B. 13 ft.
C. 17 ft.
D. 22 ft.

---

5. What is the value of *w* in the figure below to the nearest degree?



A. 25
B. 35
C. 40
D. 45

---

6. A right triangle has an angle that measures 34 and the adjacent side measures 17. What is the length of the hypotenuse to the nearest tenth?

A. 20.5
B. 25.2
C. 30.4
D. 34

---

7. θ is an acute angle of a right triangle. If $\sin \theta = \frac{12}{13}$, find $\cos \theta$ and $\tan \theta$.

a. $\cos \theta = \frac{5}{13}$ and $\tan \theta = \frac{12}{13}$

b. $\cos \theta = \frac{12}{5}$ and $\tan \theta = \frac{5}{13}$

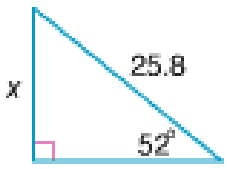
c. $\cos \theta = \frac{5}{13}$ and $\tan \theta = \frac{12}{5}$

d. $\cos \theta = \frac{12}{13}$ and $\tan \theta = \frac{12}{5}$

A. a
B. b
C. c
D. d

---

8. Find the value of *x* in the figure below. Round to the nearest tenth.



A. 20.3
B. 131.6

C. 2.1
D. 78.8

---

9. If tan $A = 0.75$, what is cos A?

a. $\frac{\sqrt{7}}{4}$

b. $\frac{4}{5}$

c. $\frac{3}{5}$

d. 4

A. a
B. b
C. c
D. d

---

10. Grove Street has a grade of 20%. That means that the street rises 20 ft for every 100 ft of horizontal distance. To the nearest tenth, at what angle does Grove Street rise?

A. 11.3 degrees

B. 11.5 degrees

C. 78.5 degrees

D. 78.7 degrees

Clear cache and cookies

How to clear cache and cookies

Google Chrome

Review the instructions in the Google Chrome Help Center .

Windows Internet Explorer, Mozilla Firefox, Apple Safari or Opera

Review and follow the instructions provided by your browser:

- Windows Internet Explorer
- Mozilla Firefox
- Apple Safari
- Opera

Details and alternatives

Effect of clearing cache and cookies: Keep in mind that clearing your cache and cookies erases your settings for websites. Here are some examples:

- If you opted to have sites remember your username and password, they will be cleared from your browser's memory when you clear cache and cookies, and you'll have to sign in again.
- Websites might load a little slower because all of the images and content pieces have to be loaded from scratch.

Recommended first step: If you're seeing problems in how webpages are displayed in your browser, we suggest first using your browser's incognito or private browsing mode to see if the problem you're seeing is caused by something other than cache or cookies.

> If you've been redirected to this page from the sign-in box, please ignore this recommendation and follow the instructions in the section above.

English