## Volume and Pythagorean Theorem (Demo Version)

Read each question carefully.

1) Which cylinder has the same volume as the cylinder in Figure 1?

Figure 1

B)

C)

D)


## Volume and Pythagorean Theorem (Demo Version)

2) Which answer is closest to the same volume as Figure 1?

Figure 1

A)

B)

C)

D)

3) Which cylinder has the same volume as the cylinder in Figure 1?


Figure 1
A)

B)

C)

D)

4) Which cylinder has the same volume as the cylinder in Figure 1?


Figure 1
A)

B)

C) $\sqrt{8} \mathrm{~cm}$


## Volume and Pythagorean Theorem (Demo Version)

5) Which cylinder has the same volume as the cylinder in Figure 1?


Figure 1
A) 9 in .

C)

D)

6) An inflatable ball has a diameter of 6 inches. About how many cubic inches of air does the ball hold?
A) 30
B) 40
C) 110
D) 900

## Volume and Pythagorean Theorem (Demo Version)

7) A 10 -foot ladder is leaned up against a house. If the bottom of the ladder is 6 feet from the side of the house, how far up the side of the house does the ladder reach?

A) 6 feet
B) 8 feet
C) 9.3 feet
D) 11.6 feet
8) A kite is flying on a 100 -foot string tied to a stake in the ground. If the kite has a vertical height of 80 feet, how far is it from the stake to a point on the ground directly below the kite?
A) 60 feet
B) 80 feet
C) 100 feet
D) 180 feet

## Volume and Pythagorean Theorem (Demo Version)

9) Which of the following is closest to the distance between point $A$ and point $B$ ?

A) 4 units
B) 5 units
C) 6 units
D) 7 units

## Volume and Pythagorean Theorem (Demo Version)

10) Which of the following is closest to the distance between point $A$ and point $B$ ?

A) 16 units
B) 18 units
C) 20 units
D) 24 units

## Volume and Pythagorean Theorem (Demo Version)

11) Which of the following is closest to the distance between point $A$ and point $B$ ?

A) 10 units
B) 9 units
C) 7 units
D) 5 units

## Volume and Pythagorean Theorem (Demo Version)

12) Jim usually sails his boat 20 miles from the boat launch to Kingston. Today he is driving the 16 miles from the boat launch to the marina. How far will he sail across the lake to Kingston from the marina?

Kingston

A) 4 miles
B) 8 miles
C) 12 miles
D) 24 miles
13) What is the value of $x$ to the nearest tenth in the diagram below?

A) 7
B) 5.3
C) 2
D) 1.4

## Volume and Pythagorean Theorem (Demo Version)

14) A ladder leans against a house. The top of the ladder is 20 feet from the ground and the base of the ladder is 15 feet from the house. What is the distance of the ladder?

A) 20 feet
B) 25 feet
C) 30 feet
D) 35 feet
15) Which is closest to the volume of the cylinder below?

A) 28.26 cubic cm
B) 169.56 cubic cm
C) 254.34 cubic cm
D) 282.6 cubic cm

## Volume and Pythagorean Theorem (Demo Version)

16) Which of the following is closest to the distance between point $A$ and point $B$ ?

A) 6 units
B) 8 units
C) 10 units
D) 12 units
17) What is the value of $x$ to the nearest tenth in the diagram below?

A) 3.6
B) 8
C) 9.2
D) 13

## Volume and Pythagorean Theorem (Demo Version)

18) A 26 -foot ladder leans against a house. The top of the ladder is 24 feet from the ground. What is the distance from the base of the ladder to the house?

A) 10 feet
B) 12 feet
C) 14 feet
D) 16 feet
19) What is the value of $b$ ?

A) 6
B) 8
C) 9
D) 16

## Volume and Pythagorean Theorem (Demo Version)

20) Mrs. Johnson has errands to accomplish at the post office and the grocery store. The grocery store is 6 miles north of the post office and the grocery store is 8 miles from home. How far is the post office from home?

A) 5.3 miles
B) 7.5 miles
C) 10 miles
D) 14 miles
21) Maureen has to visit the grocery store and the library today. What is the distance from the grocery store to the library?

A) 5 miles
B) 6 miles
c) 7 miles
D) 8 miles

## Volume and Pythagorean Theorem (Demo Version)

22) A bee flies through the air rising 45 inches off the ground. While moving upward, the bee travels 60 inches horizontally. How far has the bee traveled from its original position to now?

A) 15 inches
B) 30 inches
C) 55 inches
D) 75 inches
23) What is the approximate volume of the cylinder?

A) 2,010 cubic inches
B) 628 cubic inches
C) 502 cubic inches
D) 251 cubic inches

## Volume and Pythagorean Theorem (Demo Version)

24) Drew has to visit the grocery store and the library today. What is the distance from home to the library?
Grocery store $\frac{8 \text { miles }}{6 \text { miles }}$ Home
A) 7 miles
B) 9 miles
C) 10 miles
D) 12 miles
