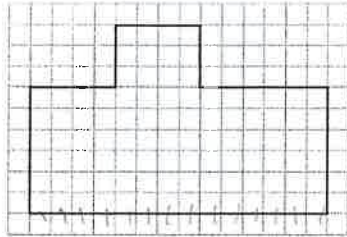


Module Quiz: B

Use the figure for 1–2.



1. The figure shows a scale drawing of a room, and each square stands for 1 square foot. What is the area of the room in square yards?

A $10\frac{2}{3}$ C 96

B 32 D 126

2. Now let the figure show a scale drawing of a park with the largest dimension equal to 63 meters. What is the scale?

A 1 unit : 3.11 m C 1 unit : 7 m

B 1 unit : 4.5 m D 1 unit : 10.5 m

- ~~X~~ Two sides of a triangle measure 25 cm and 35 cm. Which of the following could be the measure of the third side?

A 3 cm C 8 cm

B 6 cm D 11 cm

- ~~X~~ A triangle has two sides that measure 5 cm and 7 cm. Which of the following CANNOT be the measure of the third side?

A 3 cm C 7 cm

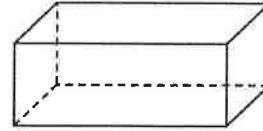
B 5 cm D 12 cm

5. A store sells towels for 25% off the regular price. The regular price of a beach towel is \$24.50. Which expression represents the sale price?

A $0.25x$ C $1.25x$

B $0.75x$ D $1.75x$

- ~~X~~ The right rectangular prism below has a square base.



The following could be the shape of a cross section of the prism EXCEPT:

A rectangle C parallelogram

B circle D square

- ~~X~~ Which of the following can form a cross section?

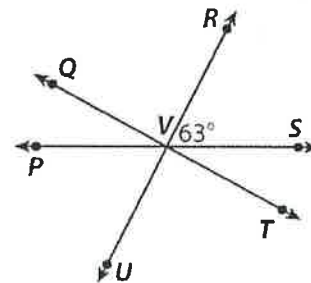
A a point and a triangle

B a plane and a cone

C a circle and a square

D a line and a point

Use the diagram for 8–9.



8. What is the measure of $\angle PVU$?

A 15° C 63°

B 33° D 117°

9. Which describes the relationship between $\angle QVP$ and $\angle PVU$?

A adjacent angles

B complementary angles

C supplementary angles

D vertical angles

10. Joey cut a 10.5-foot length of rope into 6 pieces of equal length. How long was each piece of rope?

A 0.25 ft C 2.5 ft

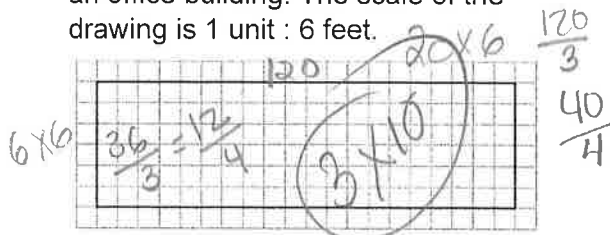
B 1.75 ft D 6 ft

MODULE 8 **Modeling Geometric Figures**

11. A scale drawing for a rectangular parking lot measures 6.8 cm by 12.3 cm. The scale is 5 cm : 25 m. Find the area of the parking lot.

2,091 m²

12. The scale drawing below is the base of an office building. The scale of the drawing is 1 unit : 6 feet.



Redraw the scale drawing using a scale of 1 unit : 4 yards. Use the grid above.

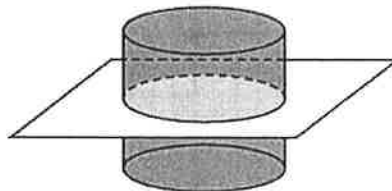
13. A triangle has angles measuring 30° and 90°. The length of the included side is 6 cm. Tell whether the conditions form a unique triangle, more than one triangle, or no triangle.

14. In the space below, draw a triangle with angles 40° and 50°, and an included side length of 2 inches.

15. Patricia bought a new swimsuit that cost \$35. Sales tax is 7.5%. How much did Patricia pay, including sales tax?

\$37.63

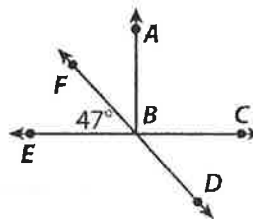
Use the figure for 16–17.



16. Describe the cross section of the cylinder by naming its shape.

17. Is it possible for the cylinder to have a cross section in the shape of a rectangle? Explain.

Use the diagram for 18–19.



18. What is the measure of $\angle EBD$?

133°

19. What is the relationship between $\angle ABF$ and $\angle ABD$?

Supplementary angles

20. Deborah has $6\frac{1}{2}$ pounds of cherries.

She wants to divide them into plastic bags with $\frac{1}{4}$ pound of cherries in each bag. Find the number of plastic bags she will need.

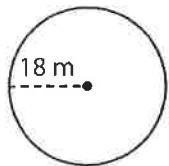
26 bags

MODULE
9

Circumference, Area, and Volume

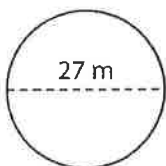
Module Quiz: B

1. What is the circumference of the circle below?



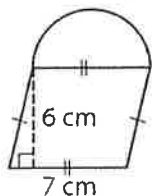
- A 36 m C 113 m
B 56.5 m D 324 m

2. What is the area of the circle below?



- A 42.4 m² C 572.3 m²
B 84.8 m² D 729.1 m²

3. What is the area of the figure below?

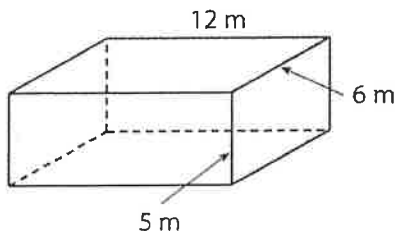


- A 42 cm² C 80.5 cm²
B 61.2 cm² D 118.9 cm²

4. Karen bought 5.5 pounds of bananas for \$0.40 per pound. How much did she pay for the bananas?

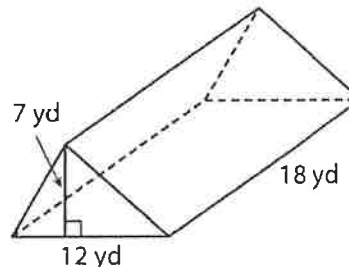
- A \$2.20 C \$4.50
B \$3.40 D \$5.70

5. What is the surface area of the rectangular prism below?



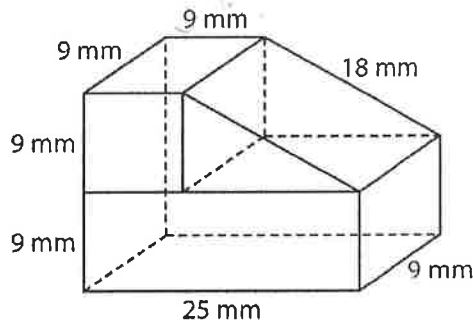
- A 60 m² C 162 m²
B 72 m² D 324 m²

6. What is the volume of the triangular prism below?



- A 42 yd³ C 756 yd³
B 84 yd³ D 1,512 yd³

Use the figure for 7–8.



7. What is the surface area of the figure above?

- A 785 mm² C 1,692 mm²
B 1,467 mm² D 1,854 mm²

8. What is the volume of the figure above?

- A 929 mm³ C 2,025 mm³
B 1,296 mm³ D 3,402 mm³

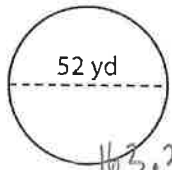
9. Henry joined an art class that charges \$125 for the cost of supplies, plus \$25 per class. Henry wants to spend no more than \$500 on art classes. Which inequality can be solved to find the number of classes Henry can take?

- A $25x + 125 < 500$
B $125x - 25 > 500$
C $25x \geq 625$
D $125x + 25 \leq 500$

MODULE
9

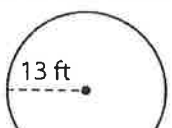
Circumference, Area, and Volume

10. Find the circumference of the circle below.



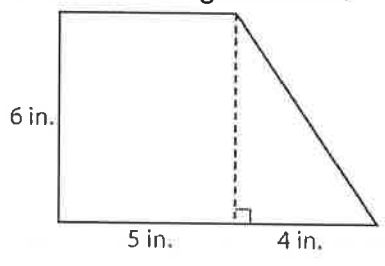
163.36 yd
 163.28 yd

11. Find the area of the circle below.



530.93
 530.66 ft^2

12. Find the area of the figure below.



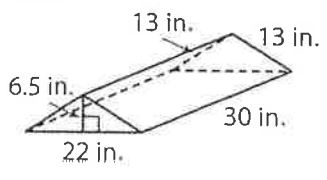
13. A half cup of milk has 4 grams of protein. Find the number of grams of protein in $2\frac{1}{4}$ cups of milk.

$\frac{1}{2}$
 $\frac{9}{4}$

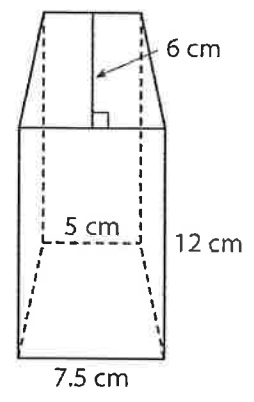
$18g$

14. Find the surface area of the triangular prism below.

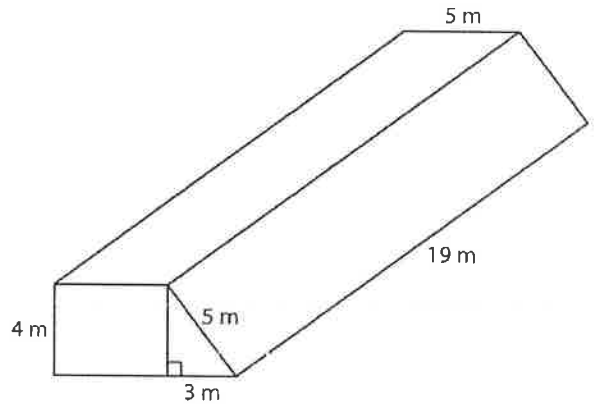
9
 4
 $\frac{1}{2}$
 8



15. Find the volume of the trapezoidal prism below.



Use the figure for 16–17.



16. Find the surface area of the figure.

17. Find the volume of the figure.

18. Wendy borrowed a 370-page book from the library. She has already read 20 pages. The book is due back to the library in 7 days. Write an inequality to find the number of pages per day Wendy must read in order to finish the book before it is due.

$7x \geq 370 - 20$