Use formulas to find the area of the figure.

1) 
![Rectangle](8 in, 11 in)

A) 19 in\(^2\)  
B) 38 in\(^2\)  
C) 88 in\(^2\)  
D) 32 in\(^2\)

2) 
![Parallelogram](9 mi, 7 mi, 3 mi, 7 mi)

A) 16 sq. mi  
B) 63 sq. mi  
C) 27 sq. mi  
D) 270 sq. mi

3) 
![Trapezoid](5 mi, 10.9 mi, 19 mi)

A) 261.6 sq. mi  
B) 130.8 sq. mi  
C) 207.1 sq. mi  
D) 54.5 sq. mi

4) 
![Triangle](14 in, 9 in, 18 in)

A) 162 in\(^2\)  
B) 81 in\(^2\)  
C) 63 in\(^2\)  
D) 126 in\(^2\)
Find the volume of the figure. If necessary, round the answer to the nearest whole number.

5) ______

A) 1767 cm³  B) 14,137 cm³  C) 7952 cm³  D) 942 cm³

6) ______

A) 234 m³  B) 3042 m³  C) 78 m³  D) 245 m³

7) ______

A) 28 in.³  B) 19 in.³  C) 13 in.³  D) 38 in.³

8) ______

A) 170 ft³  B) 1018 ft³  C) 254 ft³  D) 85 ft³
a. Name the vertex of the angle. b. Name the sides of the angle. c. Name the angle in three different ways.

9)  

A) a. point BAC; b. rays BA and CA; c. \( \angle A, \angle BAC, \angle CAB \)
B) a. point A; b. rays AB and AC; c. \( \angle A, \angle BAC, \angle CAB \)
C) a. point C; b. rays AB and AC; c. \( \angle A, \angle ABC, \angle CAB \)
D) a. point C; b. rays BA and CA; c. \( \angle A, \angle BAC, \angle ABC \)

Find the surface area of the figure.

10)  

A) 70 m²  B) 59 m²  C) 118 m²  D) 140 m²

Classify the angle as acute, right, straight or obtuse.

11)  

A) acute  B) straight  C) obtuse  D) right

12)  

A) acute  B) obtuse  C) right  D) straight
Find the measures of angles 1, 2, and 3.

A) \( \angle 1 = 149^\circ, \angle 2 = 59^\circ, \angle 3 = 149^\circ \)  
B) \( \angle 1 = 149^\circ, \angle 2 = 31^\circ, \angle 3 = 149^\circ \)  
C) \( \angle 1 = 31^\circ, \angle 2 = 149^\circ, \angle 3 = 31^\circ \)  
D) \( \angle 1 = 59^\circ, \angle 2 = 149^\circ, \angle 3 = 59^\circ \)

Find the measure of the angle in which \( ?^\circ \) appears.

14) \( ? \)
A) 117°  
B) 27°  
C) 37°  
D) 153°

15) \( ? \)
A) 131°  
B) 166°  
C) 76°  
D) 71°

Solve the problem.

16) A 7-inch apple pie sells for $4. What is its cost per square inch (in²)? Round to the nearest cent.

17) The hour hand of a clock moves from 12 to 7 o’clock. Through how many degrees does it move?  
A) 7°  
B) 84°  
C) 210°  
D) 252°

18) A container of motor oil has a volume of 6000 cubic centimeters. How many liters of oil does the container hold?
Find the measure of angle A for the triangle shown.

19) \[
\begin{array}{c}
\text{C} \quad 38^\circ \\
\text{B} \quad 98^\circ \\
\text{A} \\
\end{array}
\]

A) 52°  
B) 224°  
C) 44°  
D) 8°

Use similar triangles and the fact that corresponding sides are proportional to find the length of the side marked with an x.

20) \[
\begin{array}{c}
15 \text{ m} \\
12 \text{ m} \\
\-x- \\
3 \text{ m} \\
4 \text{ m} \\
5 \text{ m} \\
\end{array}
\]

A) 12 m  
B) 5 m  
C) 3 m  
D) 9 m

Find the area of the figure.

21) \[
\begin{array}{c}
6 \text{ ft} \\
10 \text{ ft} \\
10 \text{ ft} \\
10 \text{ ft} \\
\end{array}
\]

A) 60 ft²  
B) 200 ft²  
C) 12,000 ft²  
D) 260 ft²

Find the perimeter of the figure shown. Express the perimeter in the same unit of measure that appears on the given side or sides.

22) \[
\begin{array}{c}
4 \text{ cm} \\
4 \text{ cm} \\
5 \text{ cm} \\
16 \text{ cm} \\
11 \text{ cm} \\
\end{array}
\]

A) 58 cm  
B) 71 cm  
C) 62 cm  
D) 46 cm

Find the measure of the supplement of the angle.

23) Find the supplement of 113°.

A) 247°  
B) 67°  
C) 157°  
D) 203°
Find the circumference and area of the circle. Round the answer to the nearest whole number.

24)

24) 

A) 50 in, 3217 in$^2$ 
B) 101 in, 804 in$^2$ 
C) 50 in, 201 in$^2$ 
D) 101 in, 101 in$^2$

Use the Pythagorean Theorem to find the missing length in the right triangle. Use a calculator to find square roots, rounding, if necessary, to the nearest tenth.

25)

25) 

A) 10.5 in. 
B) 14 in. 
C) 15 in. 
D) 12 in.

Solve the problem. Round all circumference and area calculations to the nearest whole number.

26) How many flowers spaced every 4 inches are needed to surround a circular garden with a 15-foot radius? Round all circumference and area calculations to the nearest whole number.

26) 

A) 282 flowers 
B) 376 flowers 
C) 266 flowers 
D) 141 flowers

Use two formulas for volume to find the volume of the figure. Round the answer to the nearest whole number.

27)

27) 

A) 16,755 cm$^3$ 
B) 628 cm$^3$ 
C) 890 cm$^3$ 
D) 1361 cm$^3$
Find the measure of the angle.

28) Find the measure of angle 3 in the figure shown.

\[ \text{Options: } \]
- A) $70^\circ$
- B) $50^\circ$
- C) $80^\circ$
- D) $60^\circ$