1. Find the missing side length.
   Assume that all intersecting sides meet at right angles.
   Be sure to include the correct unit in your answer.

2. The perimeter of the figure is 16 yards.
   Find the length of the missing side.

3. Find the area of this square.

4. The figure below shows a rectangular court.
   (a) Use the calculator to find the perimeter and area of the court.
       Make sure to include the correct units.
       
       **Perimeter:**
       **Area:**
   
   (b) A strip of tape will be placed around the court.
       Which measure would be used in finding the amount of tape needed?
       - Perimeter
       - Area
   
   (c) The court will have a wood floor.
       Which measure would be used in finding the amount of wood needed?
       - Perimeter
       - Area
5. Ann wants to buy new carpet for her living room floor. The floor is in the shape of a rectangle, its length is 19 feet and its width is 12 feet. Suppose carpet costs $8 for each square foot. How much will carpet cost for the floor?

$_____

6. Find the area and perimeter of the rectangle with vertices (4, -3), (-1, -3), (-1, 0), and (4, 0).
   Note that you can draw in the Scratch Area below, but it is not part of the answer.

Area: ____ square units
Perimeter: ____ units

7. Find the area of this parallelogram. Be sure to include the correct unit in your answer.

8. Find the area of the right triangle.

Area: ____ square units
9. The entire rectangle below has an area of 92 in².  
Find the area of the shaded triangle.  
Be sure to include the correct unit in your answer.

10. Find the area of the triangle below.  
Be sure to include the correct unit in your answer.

11. Find the area of the figure below by first finding the areas of the rectangle and triangle.  

12. Find the area of this trapezoid.  Be sure to include the correct unit in your answer.
13. Find the area of the shaded figure.

14. Find the area of the figure. (Sides meet at right angles.)

15. Find the area of the figure. (Sides meet at right angles.)

16. Miguel's backyard has cement and grass. Find the area of the part with cement. (Sides meet at right angles.)
17. A rectangular region is removed from another rectangular region to create the shaded region shown below. Find the area of the shaded region.

![Rectangular Region Diagram]

18. Here are three solids.

(a) ![Solid A]
(b) ![Solid B]
(c) ![Solid C]

For each net below, select the solid above to which it folds.

1. [Net 1]
2. [Net 2]
3. [Net 3]
4. [Net 4]

19. The solid below is made from cubes. Find its volume.

![Cubical Solid Diagram]

20. Find the volume of the rectangular prism.

![Rectangular Prism Diagram]
21. The large solid below is made from small cubes. Each has a side length of \( \frac{1}{3} \) m.

Answer the questions below. Write your answers in simplest form.

(a) How many small cubes is the large solid made of? 

(b) What is the volume of one of the small cubes? 

(c) What is the volume of the large solid?

22. Find the volume of the rectangular prism.
Write your answer in simplest form.

23. A company rents storage sheds shaped like rectangular prisms. Each shed is 13 feet long, 7 feet wide, and 10 feet tall. The rental cost is $5 per cubic foot. How much does it cost to rent one shed?
26. The figure below shows a hollow box in the shape of a rectangular prism. Note that the box has a lid.

![Diagram of a rectangular prism with dimensions 2 ft x 15 ft x 10 ft]

(a) Use the calculator to find the surface area and volume of the box.
   Make sure to include the correct units.
   Surface area: _____
   Volume: _____

(b) The box is to be filled with sand. Which measure would be used to find the amount of sand the box will hold?
   - Surface area
   - Volume

(c) The box needs to be painted. Which measure will help the carpenter know how much paint to buy?
   - Surface area
   - Volume

27. A rectangular prism and its net are shown below.
   (All lengths are in centimeters.)

![Diagram of a rectangular prism and its net]

(a) Find the following side lengths for the net.
   \[A = \text{cm}, \quad B = \text{cm}, \quad C = \text{cm}, \quad D = \text{cm}\]

(b) Use the net to find the surface area of the prism.
   _____ cm²

28. David built a large wooden storage box. The box was in the shape of a rectangular prism, as shown below. He covered all the sides of the box with special wallpaper that cost a total of $354. How much did the wallpaper cost per square foot?

![Diagram of a rectangular prism with dimensions 4 ft x 2 ft x 5 ft]
29. Find the surface area of this triangular prism. Be sure to include the correct unit in your answer.

30. A right triangular prism and its net are shown below. (All lengths are in yards.)

(a) Find the following side lengths for the net.

\[ A = \ldots \text{yd} \]
\[ B = \ldots \text{yd} \]
\[ C = \ldots \text{yd} \]
\[ D = \ldots \text{yd} \]

(b) Use the net to find the surface area of the prism.

\[ \ldots \text{yd}^2 \]