

NAME: _____

1)

The base of a triangle has length of 3 centimeters. The height drawn to that base is 15 centimeters long. What is the area of this triangle?

- A** 45 sq cm **C** 22.5 sq cm
B 36 sq cm **D** 18 sq cm

2)

The sides of a rectangle measure 7 yd, 3 yd, 7 yd, and 3 yd. What is the area of the rectangle?

- A** 20 yd²
B 21 yd²
C 42 yd²
D 49 yd²

3) (challenge)

The sides of a right triangle measure 8 ft, 15 ft, and 17 ft. The longest side of this right triangle is opposite its right angle. What is the area of the right triangle?

- A** 60 sq ft
B 68 sq ft
C 120 sq ft
D 127.5 sq ft

4) (challenge)

The sides of an isosceles triangle measure 10 mm, 10 mm, and 12 mm. When the longest side of this triangle serves as its base, the height drawn to that side is 8 mm. What is the area of this triangle?

- A** 40 mm²
B 48 mm²
C 80 mm²
D 96 mm²

5)

Carlos is buying carpeting that costs \$22 per square yard. How much will it cost to cover his rectangular living room floor, which is 4 yards wide and 5 yards long?

- A. \$198
- B. \$220
- C. \$440
- D. \$484

6) (challenge)

A triangular sail has two sides that meet at a right angle. Both sides are 9 yards long. What is the area of the sail?

- A. $40\frac{1}{2} \text{ ft}^2$
- B. 45 ft^2
- C. 81 ft^2
- D. 162 ft^2

7)

A suncatcher has 6 sections. Each section is in the shape of a parallelogram with a base of 12 cm and a height of 8 cm. What is the total area of the sections?

- A. 768 cm^2
- B. 576 cm^2
- C. 432 cm^2
- D. 120 cm^2

Extension Work!

8) (challenge)

A commemorative plaque is in the shape of a trapezoid with a height of 8 inches and bases that measure 12 inches and 15 inches. What is the area of the plaque?

A. 108 in.^2

B. 135 in.^2

C. 150 in.^2

D. 163 in.^2

9)

Brett has a square vegetable garden that measures 18 ft on each side. One bag of fertilizer can cover 54 square feet.

A. What is the area of the vegetable garden? Show your work.

B. How many bags of fertilizer will Brett need to cover the entire garden? Explain how you found your answer.

10)(challenge)

Mary is a painter. She painted the four walls and the ceiling of a warehouse that was 28 feet long, 20 feet wide, and 8 feet high. The paint she used cost \$22 per gallon and covered 350 square feet per gallon. Select True or False for each statement.

- | | | |
|---|----------------------------|-----------------------------|
| A. Two of the walls were 28 feet by 8 feet. | <input type="radio"/> True | <input type="radio"/> False |
| B. Two of the walls were 28 feet by 20 feet. | <input type="radio"/> True | <input type="radio"/> False |
| C. The area of one of the walls is 160 square feet. | <input type="radio"/> True | <input type="radio"/> False |
| D. Mary needed 4 gallons of paint. | <input type="radio"/> True | <input type="radio"/> False |
| E. The cost of the paint was more than \$90. | <input type="radio"/> True | <input type="radio"/> False |

11)(challenge)

Chung tiles floors. For each of his four jobs, he wrote down the floor size and the cost of the tile he was using. Draw a line from each floor size/cost per tile to its total cost of the tiles.

- | | |
|--|----------|
| A. 8 feet by 12 feet; \$1.90 per square foot | \$184.50 |
| B. 9 feet by 11 feet; \$1.85 per square foot | \$182.40 |
| C. 7 feet by 14 feet; \$1.80 per square foot | \$183.15 |
| D. 6 feet by 15 feet; \$2.05 per square foot | \$176.40 |