Math 084 W2010 Worksheet 3.3 v01
Interest Exercises
Dressler

Name_____

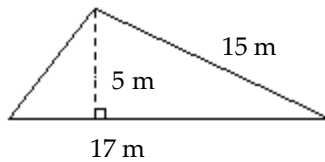**Use a formula for perimeter or area to solve the problem.**

1)

11 ft

10 ft | Rectangle | 10 ft

11 ft

Find the perimeter of the figure.

2)

8.9 mi

8.9 mi | Square | 8.9 mi
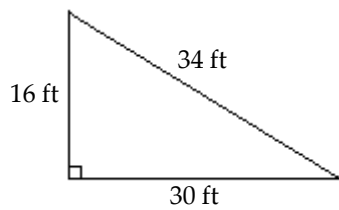
8.9 mi
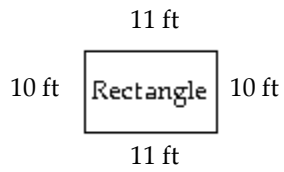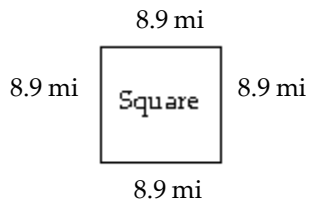
Find the perimeter of the figure.
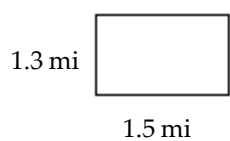
3)

15 m

5 m

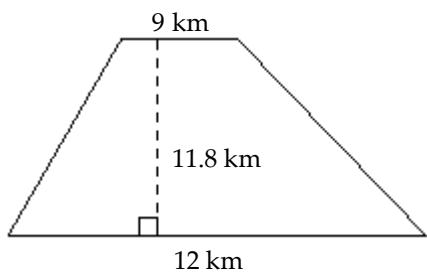17 m

Find the area of the triangle.

4)

Find the area of the triangle.

5)

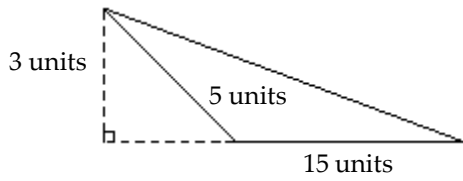Find the area of the rectangle.

6)

Find the area of the trapezoid.

7)

Find the area of the square.

8)

Find the area of the triangle.

9) The length of a rectangle is 132 in. and the width is 33 in. Find its perimeter.

10) The width of a room is 9 feet, and the area of the room is 99 square feet. Find the room's length.

Solve.

11) To trim the edges of a rectangular table cloth, 60 feet of lace are needed. The length of the table cloth is exactly one–half its width. What are the dimensions of the table cloth?

12) A rectangular carpet has a perimeter of 240 inches. The length of the carpet is 68 inches more than the width. What are the dimensions of the carpet?
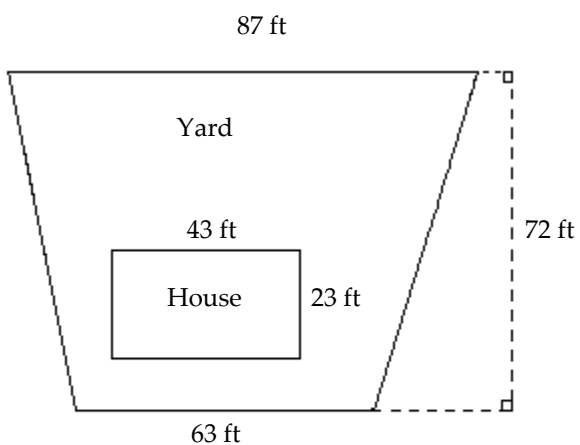
13) The length of a rectangular room is 3 feet longer than twice the width. If the room's perimeter is 174 feet, what are the room's dimensions?

14)
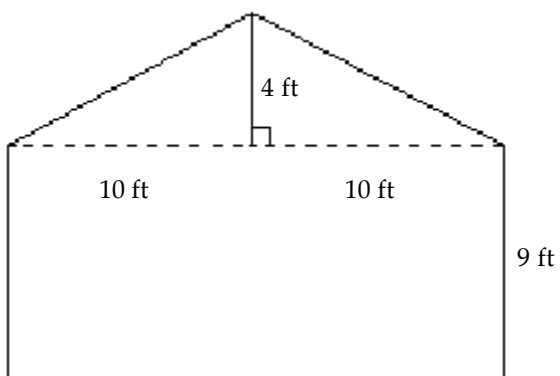
The drawing shows the end of a building that is to be bricked. If the area of the side of a brick used is $\frac{1}{6}$ sq. ft,

find the number of bricks needed to completely cover the side of the building.

15)

A homeowner wants to know how much grass seed to buy. First the size of the yard must be determined. Use th drawing to determine how many square feet are in the yard.

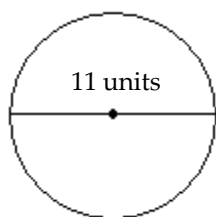**Use the formula for the area or circumference of a circle to solve the problem. Where applicable, express answers in terms of π.**
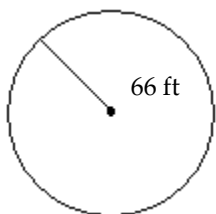
16)
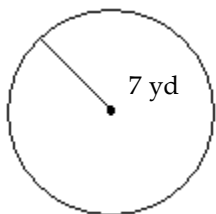
Find the area of the circle.

17)

Give the exact circumference.

18)

Give the exact circumference.

19) The circumference of a circle is 24π meters. Find the circle's radius.

20) The circumference of a circle is 26π meters. Find the circle's diameter.

Solve.

21) Which one of the following is a better buy: a 16–inch pizza for $12 or two 6–inch pizzas for $11.

22) Find the area of the skating rink. Use π = 3.14 and round to the nearest tenth.

40 yd

11 yd
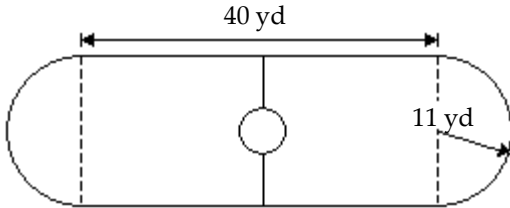
23) Find the area of the window. Use π = 3.14 and round to the nearest tenth.

7 dm

4 dm
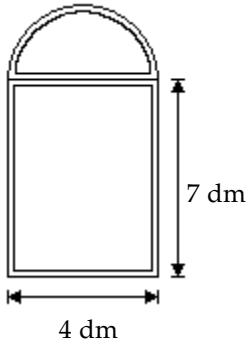
24) The rectangular part of the field shown below is 159 yd long and the diameter of each semicircle is 20 yd. Find the cost of fertilizing the field at $0.10 per square yard. Use π = 3.14 and round to the nearest cent.

Find the volume of the figure. Where applicable, express answers in terms of π.

25)

6 in.

6 in.

6 in.

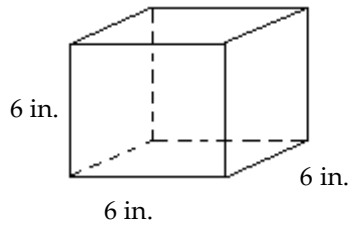**Use the relationship among the three angles of any triangle to solve the problem.**

26) Two angles of a triangle are 30° and 50°. Find the third angle.

27) Two angles of a triangle are 20° and 10°. Find the third angle.

28) Two angles of a triangle are 30° and 20°. Find the third angle.

29) Two angles of a triangle are 35° and 34°. Find the third angle.

30) Two angles of a triangle are 50° and 69°. Find the third angle.

31) Two angles of a triangle are 17° and 25°. Find the third angle.

32) One of the base angles of an isosceles triangle is 35°. Find the measures of the other two angles. (An isosceles triangle has two equal base angles.)

33) One of the base angles of an isosceles triangle is 25°. Find the measures of the other two angles. (An isosceles triangle has two equal base angles.)

34) One of the base angles of an isosceles triangle is 24°. Find the measures of the other two angles. (An isosceles triangle has two equal base angles.)

35) One angle of a triangle is 2 times as large as another. The measure of the third angle is 80° greater than that of the smallest angle. Find the measure of each angle.

36) One angle of a triangle is 3 times as large as another. The measure of the third angle is 80° greater than that of the smallest angle. Find the measure of each angle.

37) One angle of a triangle is 3 times as large as another. The measure of the third angle is 105° greater than that of the smallest angle. Find the measure of each angle.

38) A triangle has angles of $(4x)°$, $(3x + 8)°$, and $(2x + 19)°$. Find the measure of each angle.

39) A triangle has angles of $(4x)°$, $(3x + 6)°$, and $(2x + 12)°$. Find the measure of each angle.

40) A triangle has angles of $(4x)°$, $(3x + 7)°$, and $(2x + 29)°$. Find the measure of each angle.

41) Two angles of a triangle are 20° and 30°. Find the third angle.

Find the measure of the indicated angle.

42) Find the measure of the complement of 35°.

43) Find the measure of the complement of 10°.

44) Find the measure of the complement of 24°.

45) Find the measure of the supplement of 59°.

46) Find the measure of the supplement of 11°.

47) Find the measure of the supplement of 36°.

48) Find the measure of the supplement of 131°.

49) Find the measure of the supplement of 130°.

50) Find the measure of the supplement of 111°.

51) The angle's measure is 60° more than that of its complement.

52) The angle's measure is 30° more than that of its complement.

53) The angle's measure is 20° more than that of its complement.

54) The angle's measure is 20° more than that of its supplement.

55) The angle's measure is 60° more than that of its supplement.

56) The angle's measure is 40° more than that of its supplement.

57) The angle's measure is 80° more than triple that of its supplement.

58) The angle's measure is 60° more than triple that of its supplement.

59) The angle's measure is 20° more than triple that of its supplement.

60) The angle's measure is 70° more than that of its complement.

61) The angle's measure is 50° more than that of its supplement.

1) 42 ft
2) 35.6 mi
3) 42.5 m^2
4) 240 ft^2
5) 1.95 mi^2
6) 123.9 km^2
7) 121 km^2
8) 22.5 units^2
9) 330 in.
10) 11 feet
11) length: 10 feet; width: 20 feet
12) 94 by 26 inches
13) Width = 28 ft; length = 59 ft
14) 1320 bricks
15) 4411 ft^2
16) 49π yd^2
17) 11π units
18) 132π ft
19) 12 m
20) 26 m
21) 16–in. pizza
22) 1259.9 sq. yd
23) 34.3 sq. dm
24) $349.40
25) 216 in.^{3}
26) 100°
27) 150°
28) 130°
29) 111°
30) 61°
31) 138°
32) 35°, 110°
33) 25°, 130°
34) 24°, 132°
35) 25°, 50°, 105°
36) 20°, 60°, 100°
37) 15°, 45°, 120°
38) 53°, 59°, 68°
39) 48°, 60°, 72°
40) 61°, 55°, 64°
41) 130°
42) 55°
43) 80°
44) 66°
45) 121°
46) 169°
47) 144°
48) 49°

49) 50°
50) 69°
51) 75°
52) 60°
53) 55°
54) 100°
55) 120°
56) 110°
57) 155°
58) 150°
59) 140°
60) 80°
61) 115°