# MATH 20 EXTRA PRACTICE/8.3-8.4

## Name\_

Find the perimeter and area of the figure.





3) A rectangle 7 mi by 9 mi

## Find the perimeter. 4)



All segments are of equal length.







Find the area.





Find the length of the unlabeled side in the figure. Then find the perimeter and area of the figure. 10)



#### Solve the problem.

11) Mel plans to fence his yard for his new puppy. The yard is a 37 ft by 123 ft rectangle. Fencing costs \$7 per 10 ft section. What is the cost of the fence not including unused fencing?

12) What will it cost to buy ceiling molding to go around a rectangular room with length 17 ft and width 14 ft? The molding costs \$2.57 per linear foot.

13) A one-story building is 230 ft by 330 ft. If a square patio with sides 18 ft occupies the center of the building, how much area remains for offices?

Find the perimeter. 14)























#### Solve the problem.

24) The shape of a patio is trapezoidal with a height of 12 ft and bases of 14 ft and 8 ft. What is the cost of outdoor carpeting to cover the patio if the carpeting costs \$3.50 per ft<sup>2</sup>?

25) The shape of a barbecue pit is like a parallelogram with height of 30 in. and a base of 16 in. It costs \$1.10 per ft<sup>2</sup> to fill the pit with charcoals. How much does it cost?

#### Find the area of the figure.

26) Each square is 6 ft by 6 ft.





Find the perimeter. 28)



29)



Find the area.

30)



31)



32)





### Find the area of the shaded region.

34) Each small triangle has a height and a base of 4 m.



35)



33)



#### Find the measure of the indicated angle.

37) Two angles of a triangle are 40° and 20°. Find the third angle.

38) Two angles of a triangle are 39° and 28°. Find the third angle.

39) One of the base angles of an isosceles triangle is 39°. Find the measures of the other two angles. (An isosceles triangle has two equal base angles.)

#### Solve the problem.

40) The shape of a patio is triangular with a height of 9 ft and base of 17 ft. What is the cost of outdoor carpeting to cover the patio if the carpeting costs \$3.50 per ft<sup>2</sup>?

41) The shape of a plexiglass windshield is triangular with a height of 2.8 ft and base of 6.8 ft. What is the cost of the windshield if the plexiglass costs \$1.40 per ft<sup>2</sup>?

42) If a neighbor wants to create the area shown as a space for his dog to play, how much wire must he bury around the edge to create an "invisible" fence?



43) A man needs to repaint the two triangular gables on his house. Each gable is 22 ft long and 12 ft high. How many gallons of paint will he need if a gallon of paint covers 100 sq. ft.? (You must buy whole gallons).

Answer Key Testname: M20\_8.3-8.5

```
1) P = 38 \text{ cm}, A = 84 \text{ cm}^2
 2) P = 6.4 \text{ mi}, A = 2.56 \text{ mi}^2
 3) P = 32 \text{ mi}, A = 63 \text{ mi}^2
 4) 324 ft
 5) 98 cm
 6) 112 in.
 7) 66 m
 8) 592 yd<sup>2</sup>
 9) 156 in.<sup>2</sup>
10) unlabeled side = 9 \text{ cm}
     P =80 cm
     A = 259 \text{ cm}^2
11) $224.00
12) $159.34
13) 75,576 ft<sup>2</sup>
14) 154 m
15) 106 m
16) 15 m
17) 72 m
18) 96 m
19) 72 in.<sup>2</sup>
20) 169 m<sup>2</sup>
21) 240 cm<sup>2</sup>
22) 216 mi<sup>2</sup>
23) 130.5 m<sup>2</sup>
24) $462.00
25) $3.67
26) 216 ft<sup>2</sup>
27) 393.75 m<sup>2</sup>
28) 56 ft
29) 59 m
30) 819 yd<sup>2</sup>
31) 448 yd<sup>2</sup>
32) 546 yd<sup>2</sup>
33) 473 cm<sup>2</sup>
34) 576 m<sup>2</sup>
35) 161 m<sup>2</sup>
36) 63 m<sup>2</sup>
37) 120°
38) 113°
39) 39°, 102°
40) $267.75
41) $13.33
42) 52 m
43) 3 gallons
```