7.3 Exercises

Find the perimeter of each figure. See Examples 1 and 3.

1.

58 m
46 m
43 m
46 m
58 m

2.

1240 ft
1000 ft
930 ft
1000 ft
1240 ft

3.

51.8 m
51.8 m
48.3 m
51.8 m
51.8 m
51.8 m

4.

12.6 in.
10.5 in.
14.7 in.
24.8 in.
11.9 in.

5.

0.8 km
0.4 km
0.95 km
3 km
1.03 km

6.

7.33 cm
2.8 cm
3 cm
4.3 cm
4.17 cm

Find the area of each figure. See Examples 2 and 4.

7.

31 mm
31 mm
25 mm
31 mm
31 mm
31 mm

8.

21.4 m
20 m
13.2 m
20 m
21.4 m

9.

$5\frac{1}{2}$ ft
5 ft
$3\frac{1}{2}$ ft
5 ft
$5\frac{1}{2}$ ft

10.

$9\frac{1}{4}$ in.
8 in.
8 in.
$10\frac{1}{4}$ in.
$15\frac{3}{4}$ in.

11.

42 cm
61.4 cm
86.2 cm
42 cm
48.8 cm

12.

1.2 km
0.85 km
0.6 km
0.4 km
0.7 km
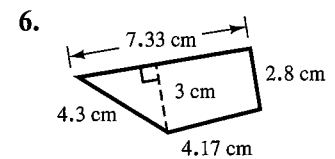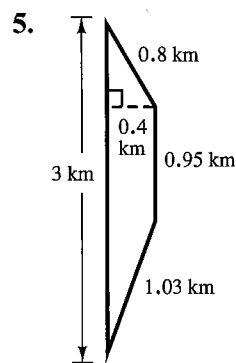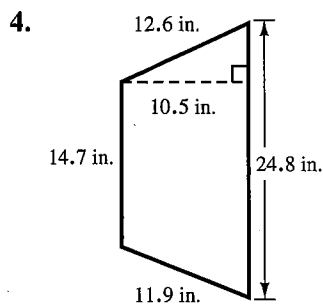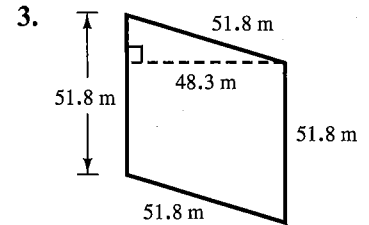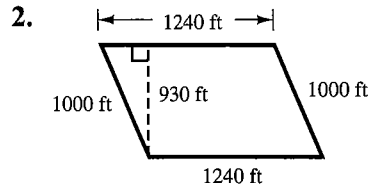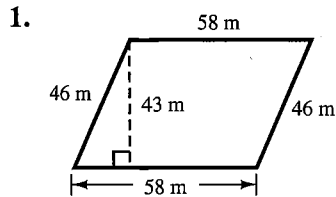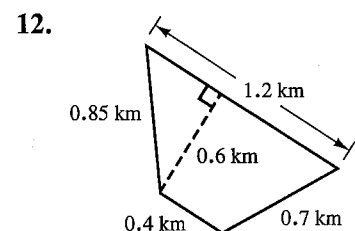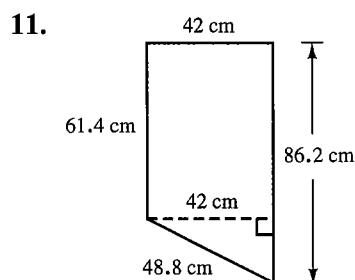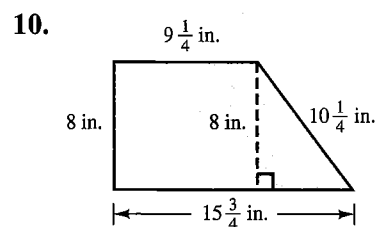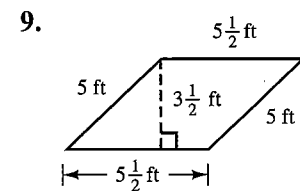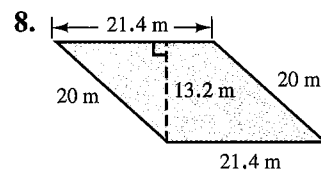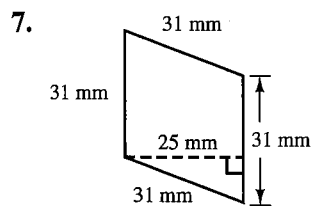
Solve each application problem. First label the bases and heights on the sketches. See Example 6.

13. The backyard of a new home is shaped like a trapezoid with a height of 45 ft and bases of 80 ft and 110 ft. What is the cost of putting sod on the yard if the landscaper charges $0.33 per square foot for sod?
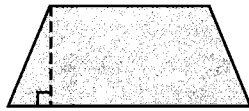
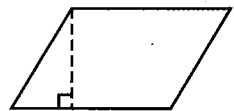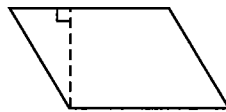**14.** A swimming pool is in the shape of a parallelogram with a height of 9.6 m and base of 12.4 m. Find the labor cost to make a custom solar cover for the pool at a cost of $4.92 per square meter.
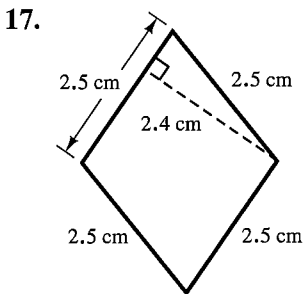
15. A piece of fabric for a quilt design is in the shape of a parallelogram. The base is 5 in. and the height is 3.5 in. What is the total area of the 25 parallelogram pieces needed for the quilt?

16. An accountant is paying $832 per month to rent an office in an old building. Her office is shaped like a trapezoid, with bases of 32 ft and 20 ft and a height of 20 ft. How much rent is she paying per square foot?
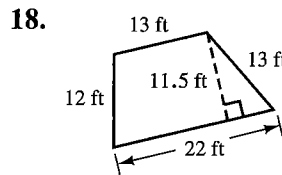
*Find **two** errors in each student's solution below. Write a sentence explaining each error. Then show how to work the problem correctly.*

17.

2.5 cm   2.5 cm
2.4 cm
2.5 cm   2.5 cm

$P = 2.5 \text{ cm} + 2.4 \text{ cm} + 2.5 \text{ cm} + 2.5 \text{ cm} + 2.5 \text{ cm}$
$P = 12.4 \text{ cm}^2$

18.

13 ft
11.5 ft   13 ft
12 ft
22 ft

$A = (0.5)(11.5 \text{ ft}) \cdot (12 \text{ ft} + 13 \text{ ft})$
$A = 143.75 \text{ ft}$

Find the area of each figure. See Example 5.

19.

0.8 m
1.8 m
1.3 m
1.1 m   1.3 m
1.3 m
0.8 m
1.8 m

20.

87.3 cm
46.2 cm
61.7 cm
32 cm
92.3 cm

21.

96 ft
96 ft   96 ft
96 ft
72 ft
96 ft
96 ft   96 ft
96 ft