Geometry

1.7 Find Perimeter, Circumference, and Area

Perimeter (P)

Distance around a figure

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Circumference (C)

Perimeter of a circle

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Area (A)

Amount of surface covered by a figure

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Triangle

sides a, b, c

base b, height h

* P = \_\_\_\_\_\_\_\_
* A = \_\_\_\_\_\_\_\_

a

b

c

h

Square

Side *s*

* P = \_\_\_\_\_\_\_\_
* A = \_\_\_\_\_\_\_\_

*s*

4s

a + b + c

s2

½ bh

Circle

diameter d

radius r

* C = \_\_\_\_\_\_\_\_
* A = \_\_\_\_\_\_\_\_

d

r

Rectangle

Length *ℓ*

Width *w*

* P = \_\_\_\_\_\_\_\_
* A = \_\_\_\_\_\_\_\_

*w*

*ℓ*

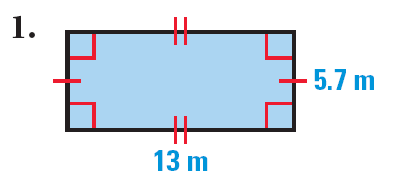
2ℓ + 2w

2πr

ℓw

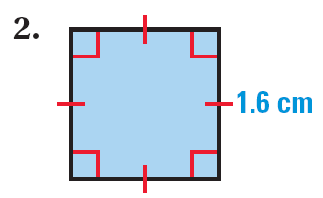
πr2

Find the area and perimeter (or circumference) of the figure. If necessary, round to the nearest tenth.



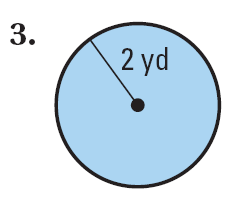
A = 13(5.7) = 74.1 m2

P = 2(13) + 2(5.7) = 37.4 m



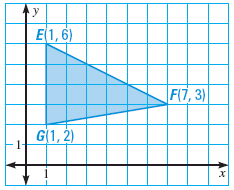
A = (1.6)2 = 2.6 cm2

P = 4(1.6) = 6.4 cm



A = π(2)2 = 4π = 12.6 yd2

P = 2π2 = 4π = 12.6 yd

Describe how to find the height from F to in the triangle.

The height is perpendicular to the base, so it hits EG at (1, 3).

Distance from (1, 3) to (7, 3) = 6

Find the perimeter and area of the triangle.

Perimeter: find the lengths of each side

EG = 4

FG =

EF =

Area: ½ (4)(6) = 12

What if each side of the triangle were twice as long, would it cover twice as much area?

No, the area would be four times as big

The area of a triangle is 64 square meters, and its height is 16 meters. Find the length of its base.

A = ½ bh

64 = ½ b (16)

64 = 8b

b = 8

Assignment: 52 #2-42 even, 46, 48-52 all = 27 total

Extra Credit: 56 #2, 6