Area 2.2 (KEY)
Geometry

1) What is perimeter?
Distance Around an Object

2) What is area?
Number of Squares to Cover an Object

3) What is volume?
Number of Cubes to Fill an Object

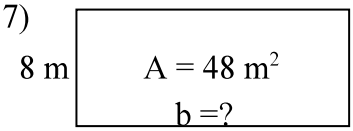
Given a figure and its dimensions, calculate its area.

4) Rectangle
b = 12 in **A = b·h**
h = 19 in **A = (12 in)(19 in)**
A = **A = 228 in²**

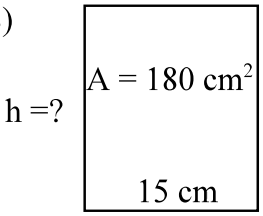
5) Parallelogram
b = 38 m **A = b·h**
h = 26 m **A = (38 m)(26 m)**
A = **A = 988 m²**

6) Triangle
b = 11 cm **A = (b·h)÷2**
h = 28 cm **A = $\frac{(11\text{ cm})(28\text{ cm})}{2}$**
A = **A = 154 cm²**

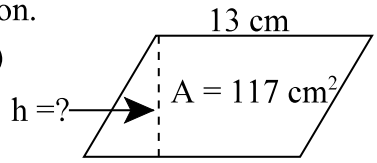
Given the area of a figure and its base or height, calculate the other dimension.

7)


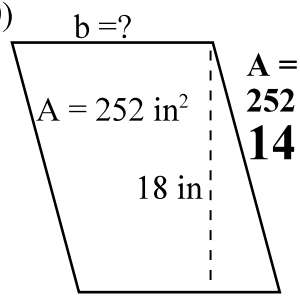
A = b·h
48 m² = b(8m)
6m = b

8)


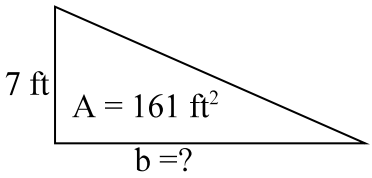
A = b·h
180 cm² =(15 cm)h
12 cm = h

9)


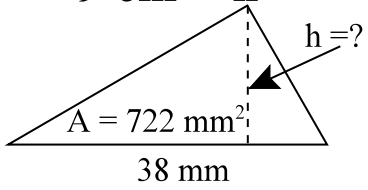
A = b·h
117 cm² = (13 cm)h
9 cm = h

10)


A = b·h
252 in² = b(18 in)
14 in = b

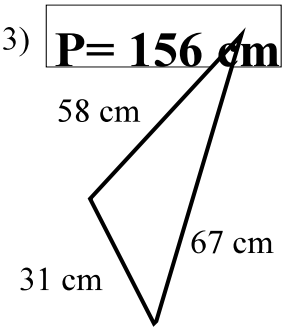
11)


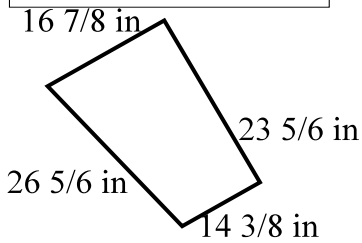
A = $\frac{(b\cdot h)}{2}$
161 ft² = $\frac{b(7\text{ ft})}{2}$
46 ft = b

12)


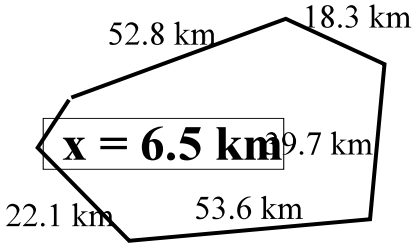
A = $\frac{(b\cdot h)}{2}$
722 mm² = $\frac{(38\text{ mm})h}{2}$
38 mm = h

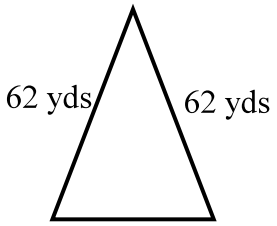
Give the perimeter of the following polygons.

13) **P= 156 cm**


14) **P= 81 11/12 in**


Find the length of the missing side.

15) P=193 km


16) P=141 yds


x = 17 yds

17) A roll of wallpaper covers 84 ft^2. How many rolls are needed to cover a room of 756 ft^2? What will the wallpaper for the job cost at $7.00/roll?

$$84\overline{)\,756}\quad 9\,rolls$$

9 rolls ($7.00) = $63.00

18) A bag of grass seed covers 1,500 ft^2. How many bags will be needed to cover a yard of 19,500 ft^2? What will the seed cost at $2.50/bag?

$$1{,}500\overline{)\,19{,}500}\quad 13\,bags$$

13 bags($2.50) = $32.50