Area 2.3 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

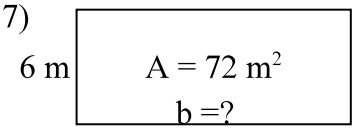
Given a figure and its dimensions, calculate its area.

4) Rectangle
b = 9 in **A = b·h**
h = 7 in **A = (9 in)(7 in)**
A = **A = 63 in²**

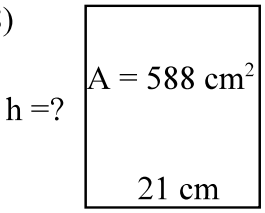
5) Parallelogram
b = 47 m **A = b·h**
h = 61 m **A = (47 m)(61 m)**
A = **A = 2867 m²**

6) Triangle
b = 14 cm **A = (b·h)÷2**
h = 12 cm **A = $\frac{(14\text{ cm})(12\text{cm})}{2}$**
A = **A = 84 cm²**

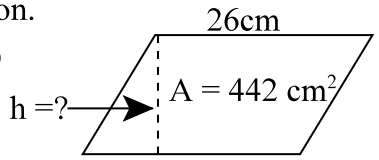
Given the area of a figure and its base or height, calculate the other dimension.

7)


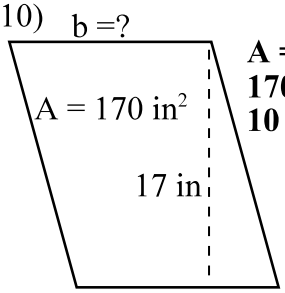
A = b·h
72 m² = b(6m)
12m = b

8)


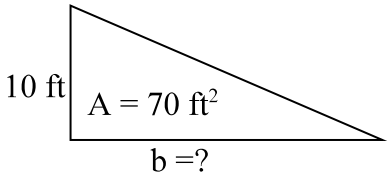
A = b·h
588 cm² =(21 cm)h
28 cm = h

9)


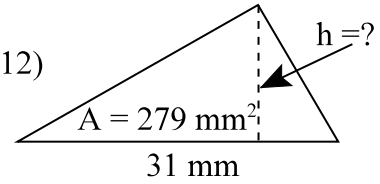
A = b·h
442 cm² = (26 cm)h
17 cm = h

10)


A = b·h
170 in² = b(17 in)
10 in = b

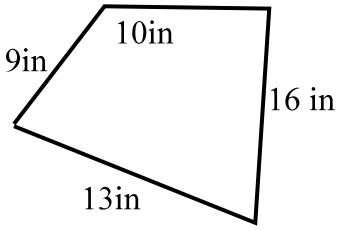
11)


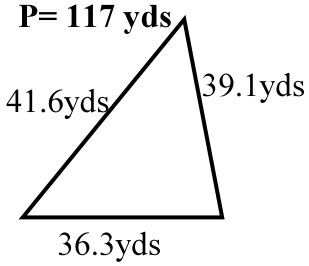
A = $\frac{(b\cdot h)}{2}$
70 ft² = $\frac{b(10\text{ ft})}{2}$
14 ft = b

12)


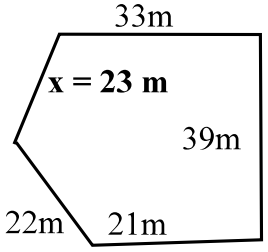
A = $\frac{(b\cdot h)}{2}$
279 mm² = $\frac{(31\text{ mm})h}{2}$
18 mm = h

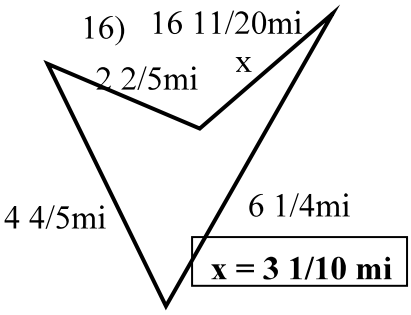
Give the perimeter of the following polygons.

13) **P= 48 in**


14) **P= 117 yds**


Find the length of the missing side.

15) P=138m


16) 16 11/20mi


x = 3 1/10 mi

17) An office has 2600 ft² of floor space. The manager wants to cover the floor with rubber tiles that measure 8 ft² each. If tile costs $12.00/unit, how many tiles will be needed? What will they cost?

$$8\overline{)2600}\quad 325\text{ tiles}$$

325 tiles($12) = $3,900

18) Tom is laying a concrete slab that measures 800 ft². If a bag of concrete mix makes enough concrete to cover 16 ft², how many bags will Tom need for the job? If the cost of the concrete is $6.00/bag, what will the mix cost for the job?

$$16\overline{)800}\quad 50\ bags$$

50 bags($6) = $300