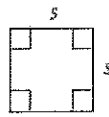


Cornell Notes

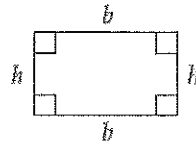
Name: _____
 Class/Period: _____
 Date: _____

Main Ideas/Questions

Topic/ Objective: 1-9 Perimeter, Circumference, & Area
 10-1 Areas of Parallelograms and Triangles



Square with side length s
 Perimeter $P = 4s$
 Area $A = s^2$



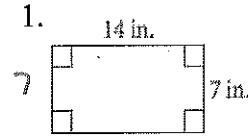
Rectangle with base b and height h
 Perimeter $P = 2b + 2h$
 Area $A = bh$



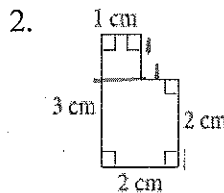
Circle with radius r and diameter d
 Circumference $C = \pi d$, $A = 4(4) + \pi(2)^2$
 or $C = 2\pi r$ $= 16 + 2\pi$ in²
 Area $= \pi r^2$

Examples:

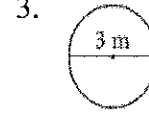
Find the perimeter (or circumference) and area of each figure.



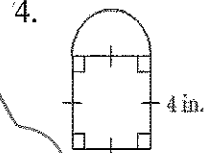
$P = 42$ in.
 $A = 98$ in² = 7.14



$P = 10$ cm
 $A = 1 \cdot 1 + 2 \cdot 2 = 5$ cm²



$C = 2\pi(1.5) = 9.4$ OR 3π m
 $A = \pi(1.5)^2 = 7.1$ OR 2.25π m²



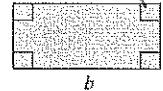
$P = 4 + 4 + 4 + 2\pi(2)$
 $= 12 + 2\pi$ in²

Theorem 10-1

Area of a Rectangle

The area of a rectangle is the product of its base and height.

$$A = bh$$

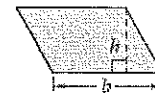


Theorem 10-2

Area of a Parallelogram

The area of a parallelogram is the product of a base and the corresponding height.

$$A = bh$$



Theorem 10-3

Area of a Triangle

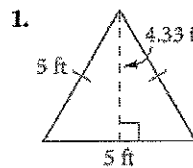
The area of a triangle is half the product of a base and the corresponding height.

$$A = \frac{1}{2}bh$$

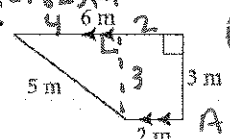


Examples:

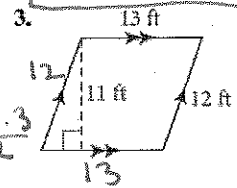
If possible, find the perimeter and area of each figure. If not possible, state why.



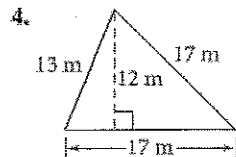
$A = \frac{5(4.33)}{2} = 10.825$ ft²
 $P = 5 + 5 + 5 = 15$ ft



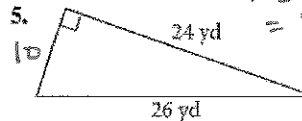
$P = 16$ m
 $A = \frac{2 \cdot 3}{2} = 3$ m²



$P = 50$ ft
 $A = 13 \cdot 11 = 143$ ft²

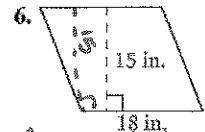


$P = 47$ m
 $A = \frac{12 \cdot 17}{2} = 102$



$x^2 + 24^2 = 26^2$
 $x = 10$

$= 6 + 6 = 12$ m²



$A = 15(18) = 270$ in²

$P = 60$ yds.
 $A = \frac{10 \cdot 24}{2} = 120$ yds²