

2.3 Formulas

Need To Know



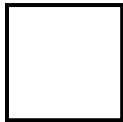
- Basic formulas
- Evaluating formulas
- Solving formulas

Formulas to Memorize

■ Square

Area =

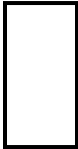
Perimeter =



■ Rectangle

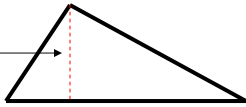
Area =

Perimeter =



■ Triangle

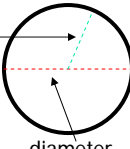
1. Area =
2. Perimeter =



height

■ Circle

1. Area = πr^2
2. Circumference = $2\pi r$



radius

diameter



Evaluating Formulas

The power rating P , in watts, of an electrical appliance is determined by $P = V \cdot I$, where I is the current, in amperes, and V is the voltage, measured in volts. If a kitchen requires 30 amps and there is 115 volts in the house, what is the wattage in the kitchen? (2.3 #2)



Evaluating Formulas

A farmer has 76 feet of fencing. He plans to make a pig pen that is 10 feet wide. How long will it be?



Solving Formulas

Sometimes formulas need to be rearranged.

We must solve for a different variable in the formula.

We use algebra to isolate that variable.

In other words, we undo all the operations associated with that variable to get it by itself.

Solve for a: $c = a + b$

Solve for W: $A = LW$



Practice

Solve $I = Prt$, for t . (You try it)



Practice

Solve $P = 2W + 2L$ for L .



Practice

Solve $S = rx + sx$, for x .

Remember:

to collect like terms
may mean factoring.



Practice

Solve $H = \frac{a + y - k}{4}$, for y .

Remember:

Clear fraction first by
multiplying the LCM.

end