

Algebra RH

Essential Question: How do we solve equations involving formulas?

Do Now:

Write as many **formulas** as you can (*Hint: Think of formulas discussed during math and science classes*).

1.

2.

3.

4.

5.

6.

Formula: _____

Dependent Variable: A variable in a relationship (formula). Its value *depends* upon or is determined by the other variable(s) (independent variable).

Independent Variable: A variable in a relationship (formula). Its value determines the value of the other variable (dependent variable).

Examples:

a.

b.

Using a Formula

1. Using the formula $F = \frac{9}{5}C + 32$, find F° if $C = 25^\circ$

2. If $F^\circ = -22$, find C°

3. What happens to the circumference of a circle if the radius is multiplied by 5?

Writing Formulas

Best Bikes Rental

- Insurance fee \$650
- Daily Charge \$80
- Mileage Charge \$0.10 per mile

A. How much would it cost to rent a bike for 4 days and "drive" it 350 miles?

B. Write a formula for calculating the total cost of a bike rental at Best Bikes.

What procedure can we use to write a formula?

1.

2.

Examples:

1. Write a formula for calculating the cost of video rentals if each video costs \$1.50 to rent and there is a one time membership fee of \$50.00.
2. Write a formula for calculating the ticket sales if a theater charges \$7.50 per adult admission and \$3.50 per child admission.
3. Write a formula calculating Stanley's salary for one day if he earns a daily salary of \$63.00 and \$8.50 per hour in overtime following 9 hours of work.