

Expression vs. Equation

An **expression** is a mathematical phrase that contains numbers, variables, or both. Expressions never have an equal sign.

$$2f + 7$$

An **equation** states that two expressions are equal. Equations always have an equal sign.

$$2f + 7 = 31$$

Expressions and equations are made of different parts. Take a closer look at each part of the expression below.

Variable: a letter that represents an unknown

Term: a part of an expression that is separated by + or -

Constant: a number without a variable

Coefficient: the number multiplied by a variable

Expressions and equations can also include **factors**, or numbers you multiply to get another number.

In $2f + 7$, the first term has two factors: **2** and **f**.

Directions: Draw a circle around each expression. Draw a rectangle around each equation.

$$6 + k = 14$$

$$\frac{2}{3} \div \frac{1}{7}$$

$$0.25g \times 0.76h$$

$$10^4 = 5z$$

$$8w - 3w = 20$$

$$3 = (2p + 7) \div 5$$

$$(6 + 9) \times 4$$

$$2m + 7n = 14n - 1$$

$$\frac{3 + 2j}{10}$$

Directions: Answer the questions about the following expressions.

$10x - y + 3.5$	$3a + 6 + b$
How many terms does the expression have? <u>3</u>	How many terms does the expression have? <u>3</u>
What is the coefficient of the first term? <u>10</u>	What are the variables? <u>a and b</u>
What is the constant term? <u>3.5</u>	What are the factors of $3a$? <u>3 and a</u>