

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

first term second term

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? _____ | How many terms does the expression have? _____ |
| What is the coefficient of the first term? _____ | What are the variables? _____ |
| What is the constant term? _____ | What are the factors of $3a$? _____ |