# Day 6_ Teacher Model

For each algebraic expression, identify the number of terms.  Then list the coefficients and any constant terms.

| Expression | $6a + 3$ | $6a - 3$ | $0.2x - y + 8z$ | $\frac{1}{2}n$ |
|---|---|---|---|---|
| Number of Terms | | | | |
| Coefficient(s) | | | | |
| Constant(s) | | | | |

# Academic Vocabulary

Match the vocabulary to the correct definition.  Write the answer in the blank on the left side of the paper.

_____  1.  Algebraic Expression          A.  Each part of an expression separated by + or -.

_____  2.  Coefficient                    B.  A number that stands by itself.

_____  3.  Constant                       C.  A number that does not stand by itself.  It is attached to the variable.

_____  4.  Term                           D.  A letter that stands for a particular numerical value.

_____  5.  Variable                       E.  A number sentence without an equal sign; has at least one term and one operation; algebraic expressions contain one or more variables.

# Model_

**Example #1:** Fill in the blank boxes the correct academic vocabulary.
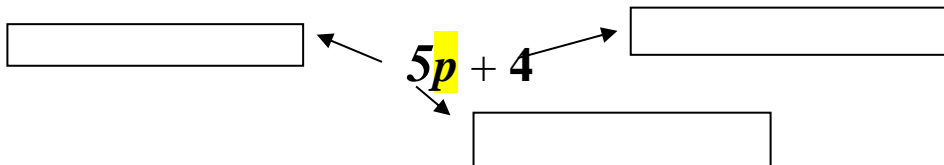
| |
|---|

$$5p + 4$$

| |
|---|

| |
|---|

**Directions:** For the examples below state the number of terms and list the coefficients, variables, and constants.

| Example #2 | Example #3 | Example #4 |
|---|---|---|
| 5p + 4 | $\frac{w}{7} + 6w^3$ | $9k^4 + k - 11$ |
| Number of terms: | Number of terms: | Number of terms: |
| List the terms: | List the terms: | List the terms: |
| Coefficients: | Coefficients: | Coefficients: |
| Variables : | Variables : | Variables : |
| Constants : | Constants : | Constants : |

# CFU_Think-Pair-Share

Identify the number of terms, the coefficients, and the constant term of the expressions below.

1.  $7p - 6pc + 3c - 2$

Number of terms: _____

Coefficients: _____

Constant terms: _____

2.  $8 + 4ab - 5b$

Number of terms: _____

Coefficients: _____

Constant terms: _____

# Guided Practice_

**Directions:** For the examples below state the number of terms and list the coefficients, variables, and constants.

| Example #1 | Example #2 | Example #3 |
|---|---|---|
| $7 - 8m$ | $X^2 - 2x + 3$ | $11x$ |
| Number of terms: | Number of terms: | Number of terms: |
| List the terms: | List the terms: | List the terms: |
| Coefficients: | Coefficients: | Coefficients: |
| Variables : | Variables : | Variables : |
| Constants : | Constants : | Constants : |

| Example #4 | Example #5 | Example #6 |
|---|---|---|
| $6$ | $3c - \frac{5}{7}c^6$ | $3v + \frac{x}{4}x - \frac{1}{2}$ |
| Number of terms: | Number of terms: | Number of terms: |
| List the terms: | List the terms: | List the terms: |
| Coefficients: | Coefficients: | Coefficients: |
| Variables : | Variables : | Variables : |
| Constants : | Constants : | Constants : |

# Model_

1) What is the coefficient for $m^4$ in the following expression $7 - 8g + m^4$?


      **Answer:**_____

2) What is the sum of the coefficients in the expression $3d + 7f + k^2$?



      **Answer:**_____

3) What is the sum of the coefficients in the expression $9h + 11p^3 - 5p$?



      **Answer:**_____

4) What is the sum of the coefficients in the expression $9h + 11p^3 - 5p$?



      **Answer:**_____

5) What is the sum of the coefficients in the expression $9 + 11p^3 - 5$?



**Answer:**_____

## Identifying Terms, Coefficients, and Constants

**For each expression, fill in the table by telling how many terms there are and by listing the coefficients and the constants.**

1.) $x + 1$

2.) $2x^2 + x - 3$

3.) $4$

4.) $10x^3yz$

5.) $3x - 6$

6.) $7y^3 - 4y^2 + 2$

7.) $-10$

8.) $a + 2b + 4c + d$

9.) $r^2 + 11r$

| Problem # | # of Terms | Coefficients | Constants |
|-----------|-----------|--------------|-----------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |