

1. Create a scenario that can be represented by the following expressions:

a.  $8 - 5$

Jack had 8 grapes on his plate and ate 5.

b.  $8p - 5p$

Ethan sold  $p$  packs of baseball cards at 8 dollars per pack. He paid 5 dollars per pack.

2. Define the following vocabulary in your own words:

a. Variable: letter used to represent an unknown quantity

b. Constant: number that is known and doesn't change.

c. Coefficient: constant multiplier in front of a variable.

d. Term: constant, variable, or product/quotient of

- e. Explain the difference(s) between expression and equation:

Equations contain an equal (=) sign

3. Label each part of the expression using the appropriate vocabulary word (use each vocabulary word once):

$$8p - 5p + 40$$

8 - coefficient

$p$  - variable

5 - coefficient

40 - constant

$8p$ ,  $5p$ , 40 - terms

4. Mr. Sacco went to Dunn Brothers this morning. A coffee costs \$2.25 and a muffin costs \$1.75. He also left a \$3 tip. Determine what each piece means in context of the problem.

$$2.25c + 1.75m + 3$$

- a. 2.25 cost of one coffee
- b.  $m$  # of muffins bought
- c.  $1.75m$  total cost of muffins
- d.  $2.25c + 1.75m$  total cost of coffee & muffins
- e.  $2.25c + 1.75m + 3$  total cost with tip

5. Label the parts of the expression using your vocabulary words: Variable, Coefficient, Constant, and Term

- a. 2.25 coefficient
- b.  $m$  Variable
- c.  $1.75m$  term
- d.  $2.25c + 1.75m$  2 term expression
- e.  $2.25c + 1.75m + 3$  3 term expression

6. Is this an equation or an expression? How do you know?

expression... there is no equal sign.

7. I gave him \$20 to get whatever he wants. How do I add that in?

$$2.25c + 1.75m + 3 \leq 20$$