

Objective: Students can identify the structure of an algebraic expression and equation with proper vocabulary. Students can interpret the context of an algebraic expression and equation.

Practice Quiz

You came to school in a hurry and realized that you forgot your lunch money. You scrounge around and find 2 one-dollar bills in your back pocket and then a bunch of change in the bottom of your school bag.

If $2 + 0.01x + 0.05y + 0.25z$ represents the amount of money you found to purchase your lunch; answer the following questions based on the context of the problem:

1. What does the 2 represent in the situation? \$ bills in pocket

2. What is the appropriate vocabulary word for 2 in the expression? constant

3. What do each of the following represent in the expression?

0.01: value of a penny

0.05: value of a nickel

0.25: value of a quarter

4. What does the $0.01x$ represent in the situation? total value of pennies

5. What does the $0.05y$ represent in the situation? total value of nickels

6. What vocabulary word describes x , y , and z in the expression? Variables

7. What vocabulary word describes 0.01, 0.05, and 0.25 in the expression? coefficients

8. What does the expression $0.01x + 0.05y + 0.25z$ represent in the situation?

total value of all the change in pocket

Objective: Students can identify the structure of an algebraic expression and equation with proper vocabulary.
Students can interpret the context of an algebraic expression and equation.

I want to get my Christmas shopping done early for my nieces and nephews, so I made a trip to Toys R Us. Connor is tough to buy for, so I am just getting him a \$25 gift card. Sully wants some video games, and Lily and Charlotte are really into the Brats dolls.

$$25 + 22.99v + 14.99d$$

1. What vocabulary term does the 25 represent?

Constant

2. What vocabulary term does the 22.99 represent?

Coefficient

3. What vocabulary term does the d represent?

Variable

4. What vocabulary term does the $14.99d$ represent?

term

5. In context of the problem, what does the 25 represent?

Cost of the gift card

6. In context of the problem, what does the 14.99 represent?

the cost of one doll

7. In context of the problem, what does the v represent?

of video games purchased

8. In context of the problem, what does the $14.99d$ represent?

total cost of dolls

9. In context of the problem, what does the $22.99v + 14.99d$ represent?

total spent on dolls & video games

10. If I walked into the store with \$120 and wanted to add that number to the expression above, would I use an equal sign or an inequality sign? Why?

Inequality ... you could spend less than or equal to \$120.