

2016 Mathematics Standards of Learning  
Algebra Readiness Formative Assessment

5.19d

1. Create a word problem that could be used to describe the given equation  $8x = 48$ .
  
2. Create a word problem that could be used to describe the given equation  $\frac{x}{7} = 9$ .
  
3. Which of these problems can be solved by using the equation  $z - 8 = 40$ 
  - a. Natalie has some cherry tomatoes that she shares with 8 of her friends. If each friend receives 40 tomatoes, how many tomatoes did she start with?
  - b. Sam had some paper clips, and his friend gave him 8 more. He now has 40 paper clips. If  $z$  represents the number of paper clips he started with, how many did he start with?
  - c. Melissa ate 8 blueberries. If  $z$  is the amount of blueberries she started with, and she has 40 left, how many blueberries did she start with?
  - d. Jack earns \$8 every time he mows the lawn. If he earned \$40 and  $z$  represents the number of times he mowed the lawn, how many times did he mow the lawn?
  
4. Which of these could be solved by using the equation  $7x = 35$ 
  - a. Marsha plants some daisies. Then she plants 7 tulips. There are 35 flowers in all. If  $x$  represents the number of daisies Marsha planted, how many daisies did she plant?
  - b. Mobee works for 7 hours. He earns a certain amount of money for each hour he works and makes a total of \$35. If  $x$  represents the amount of money he earns per hour, how much money does he make per hour?
  - c. Tamika has some cookies and eats 7 of them. There are 35 cookies left. If  $x$  represents the number of cookies she started with, how many cookies did she start with?
  - d. Pam has some candy that she shares with 7 friends. Each friend receives 35 pieces of candy. If  $x$  represents the number of pieces of candy Pam had, how many did she have?

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5. Bella brought stickers to give to 12 of her friends. Each friend received 4 stickers. Which equation describes how many stickers Bella brought to school?
- a.  $4x = 12$
  - b.  $\frac{x}{4} = 12$
  - c.  $x + 4 = 12$
  - d.  $x - 4 = 12$