2016 Mathematics Standards of Learning

Algebra Readiness Formative Assessment

# 1A.1ab

1. Evaluate the following expression when *x* = 27.



1. Sierra is going shopping to buy art supplies. She plans to buy 2 paint brushes at *p* dollars each, 6 bottles of paint at *b* dollars each, and 3 canvases at *c* dollars each. Write two different algebraic expressions to represent the total cost in dollars of these items Sierra will buy.

1. Which of the following best represents the algebraic expression ?
   1. the number of cups of flour needed to make 2 cakes that each require 4 cups of flour
   2. the area of a dog pen that has a length 2 times the width plus 4
   3. the amount of fencing needed to surround a rectangular-shaped animal pen that has a length 4 feet longer than its width
   4. the number of bulbs you can plant in a square garden where bulbs must be planted 4 inches apart
2. A cell phone company offers service for a flat rate of $20 per month, plus 3 cents a minute. Which expression could represent the monthly cost of this cell phone service?
   1. 3 + 20*m*
   2. 20 + 3*m*
   3. 0.03 + 20*m*
   4. 20 + 0.03*m*
3. What is the value of if *a* = 4, b = 8, *c* = -6, and *d* = -10.
   1. 9
   2. 3
   3. -3
   4. -9

Translate the following verbal expression in an algebraic expression:

one-half the difference of the cube of a number, x, and three

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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