4A.2 **Learning Opportunity**Multiplying and Dividing Integers



Solve each of the mathematical expressions below.

1) -3(11)

2) $-9 \times (-7)$

3) 5(-2).9

4) $63 \div (-9)$

5) -121 6) $-7(-5)^2$

Substitute the variable values: a = -2, b = 3, c = -7, and d = 4 into each expression below. Then, solve each expression.

7) b(a - c)

8) $4a \div d$

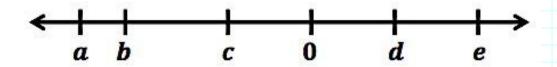
9) 9a - (4d + 2c)

10) a(b+c)-7

During hibernation, an Arctic ground squirrel can decrease its body temperature to -30 °C. 11) Use the formula $F = \frac{9}{5}C + 32$ to convert the squirrel's body temperature to degrees Fahrenheit. (F represents degrees Fahrenheit and C represents degrees Celsius. Substitute -30 for the variable C to calculate the value of the variable F).



For problems 12 through 17, use the number line pictured below to complete the comparisons by filling in each \bigcirc with <, =, or >.



13)
$$d \div c \bigcirc 0$$

16)
$$e \div a$$
 $e \div d$ 17) $c \div d$ $a \div b$

17)
$$c \div d$$
 $a \div 1$