

Bell Work: Copy the problem and only the correct answer.

N-RN.1.1

An equation is shown below. Which statement *correctly* explains what is the missing value?

$$(4^2 \cdot 4^b \cdot 4^{-3}) = 4^{(2+b+\square)}$$

- A. The missing value is 3 because  $4^2 \cdot 4^b \cdot 4^{-3} = 4^{(2+b+3)}$
- B. The missing value is -1 because  $4^2 \cdot 4^b \cdot 4^{-3} = 4^{-6}$
- ☒ C. The missing value is -3 because  $4^2 \cdot 4^b \cdot 4^{-3} = 4^{(2+b-3)}$
- D. The missing value is -125 because  $4^2 \cdot 4^b \cdot 4^{-3} = 5^{(2+b+(-125))}$

$$ax^2 + bx + c$$

ac	b
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1. make a t-chart
2. Identify a, b, c
3. multiply a & c
4. b will go on the right side
5. Find factors
6. Identify factors that add together to equal sum
7. Divide factor by a

Factoring Trinomials ( $a = 1$ )

Factor each completely.

$$ax^2 + bx + c$$

1)  $b^2 + 8b + 7$

$\xrightarrow{ac}$	8
1(7)	1+7
	$\frac{1}{1}$ $\frac{1}{1}$

$$\begin{aligned} A &= 1 \\ B &= 8 \\ C &= 7 \end{aligned}$$

Product	Sum

$$(b+1)(b+7) \text{ divide by } a$$

$$7) m^2 + 2m - 24$$

$aC$	$b$
-24	2
2(12)	
4(6)	$\frac{6-4}{1} \quad \frac{1}{1}$
3(8)	

$$\begin{aligned} A &= 1 \\ B &= 2 \\ C &= -24 \end{aligned}$$

$$(m+6)(m-4)$$

$$4) n^2 + 4n - 12$$

$$\begin{array}{r|l} -12 & 4 \\ 2(6) & 6-2 \\ 3(4) & 1 \quad 1 \end{array}$$

$$A = 1$$

$$B = -4$$

$$C = -12$$

$$(n + 6)(n - 2)$$

10)  $a^2 + 11a + 18$

$$\begin{array}{c|cc} 18 & 11 \\ \hline (2)(9) & 2 & 9 \\ 3(6) & 1 & 1 \end{array} \quad \begin{array}{l} A = 1 \\ B = 11 \\ C = 18 \end{array}$$

$$(a+2)(a+9)$$

$$a^2 - 11a + 18$$

$$\begin{array}{c|cc} 18 & -11 \\ \hline 2(9) & -2 & -9 \\ & 1 & 1 \end{array}$$

$$(a-2)(a-9)$$