

Expanding Brackets with Negatives - Worksheet 1

A negative sign outside the brackets changes the sign of every term inside the brackets.

Instruction: Multiply the negative number outside the bracket by each term inside.

1. $-3(y + 2)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-3 \times y =$ ____
 Multiply: $-3 \times 2 =$ ____

Expanded Form: $(-3 \times y) + (-3 \times 2)$
 (____) + (____)

Answer: _____

2. $-4(q + 2)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-4 \times q =$ ____
 Multiply: $-4 \times 2 =$ ____

Expanded Form: $(-4 \times q) + (-4 \times 2)$
 (____) + (____)

Answer: _____

3. $-7(a + 1)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-7 \times a =$ ____
 Multiply: $-7 \times 1 =$ ____

Expanded Form: $(-7 \times a) + (-7 \times 1)$
 (____) + (____)

Answer: _____

4. $-5(u - 2)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-5 \times u =$ ____
 Multiply: $-5 \times -2 =$ ____

Expanded Form: $(-5 \times u) + (-5 \times -2)$
 (____) + (____)

Answer: _____

5. $-2(g - 5)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-2 \times g =$ ____
 Multiply: $-2 \times -5 =$ ____

Expanded Form: $(-2 \times g) + (-2 \times -5)$
 (____) + (____)

Answer: _____

6. $-6(d - 2)$

Outside Number: ____
 Inside Terms: ____ and ____
 Multiply: $-6 \times d =$ ____
 Multiply: $-6 \times -2 =$ ____

Expanded Form: $(-6 \times d) + (-6 \times -2)$
 (____) + (____)

Answer: _____

Example: $-2(x - 4)$

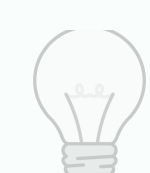
Step 1: Find the negative sign outside the brackets = -2

Step 2: Find the terms inside the brackets = x and -4

Step 3: Change the sign of each term inside the brackets.

$$\begin{array}{l} -2(x - 4) \\ -2 \times x = -2x \\ -2 \times 4 = -8 \\ \text{Expanded Form: } (-2 \times x) + (-2 \times -4) \\ (-2x) + (8) \end{array}$$

Step 4: Write the answer = $-2x + 8$



Tip

A negative number changes the sign of every term inside the brackets.