

Expanding Linear Expressions Using the Distributive Property

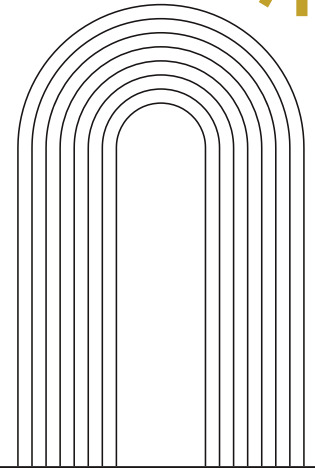


You can use the **distributive property** to expand expressions that are written as products.



Expand $4(2x + y - 6)$.

$$\begin{aligned}
 4(2x + y - 6) &= 4(2x) + 4(y) + 4(-6) && \text{Multiply each term inside the parentheses by 4.} \\
 &= 8x + 4y - 24 && \text{Simplify.}
 \end{aligned}$$



Expand each expression. Write the simplified expression on the blank.

$3(a + 7) = \underline{\hspace{4cm}}$

$9(-4t + 3) = \underline{\hspace{4cm}}$

$-5(2y - 5) = \underline{\hspace{4cm}}$

$6(3b - 7) = \underline{\hspace{4cm}}$

$-7(4q + 10r - 8) = \underline{\hspace{4cm}}$

$4(-8f - 5g + 3) = \underline{\hspace{4cm}}$

$6(x + 4 - 6y) = \underline{\hspace{4cm}}$

$2(11b - 14c + 25) = \underline{\hspace{4cm}}$

$3(1.2y + 0.8) = \underline{\hspace{4cm}}$

$-0.9(9m - 0.5) = \underline{\hspace{4cm}}$

$\frac{1}{3}(6g + 15) = \underline{\hspace{4cm}}$

$\frac{3}{4}(-12r - 8) = \underline{\hspace{4cm}}$

$-3(0.6t + 0.2u - 8) = \underline{\hspace{4cm}}$

$\frac{2}{5}(a - 10b + 5) = \underline{\hspace{4cm}}$

$-0.8(-0.6c + 1.2d + 4) = \underline{\hspace{4cm}}$

$-\frac{2}{3}(6x - y + 12) = \underline{\hspace{4cm}}$