

Add Linear Expressions

You can add expressions using the properties of operations.

Let's try it! Simplify $(2x - 15) + (-5x + 9)$.

$$(2x - 15) + (-5x + 9) \quad \text{Identify like terms.}$$

$$[2x + (-5x)] + (-15 + 9) \quad \text{Use the commutative and associative properties to reorder and group like terms.}$$

$$-3x + (-6) \quad \text{Combine like terms.}$$

$$-3x - 6 \quad \text{Rewrite addition as subtraction to simplify the final expression.}$$



Try it yourself! Find each sum.



<p>1. $(-3m + 7) + (4m - 12)$</p> <p>$m - 5$</p>	<p>2. $(-2h + 8) + (-6h + 4)$</p> <p>$-8h + 12$</p>
<p>3. $(9p - 3) + (-11p - 8)$</p> <p>$-2p - 11$</p>	<p>4. $(-t - 14) + (8t + 6)$</p> <p>$7t - 8$</p>
<p>5. $(4c + 13) + (-c + 5d - 7)$</p> <p>$3c + 5d + 6$</p>	<p>6. $(3v - 8w + 19) + (6w - 6)$</p> <p>$3v - 2w + 13$</p>
<p>7. $(2j + 10k - 7) + (-5j - 6k + 9)$</p> <p>$-3j + 4k + 2$</p>	<p>8. $(3f - 20g - 1) + (-f + 4g - 9)$</p> <p>$2f - 16g - 10$</p>
<p>9. $(-0.2n - 6.5) + (5.3n + 9.4)$</p> <p>$5.1m + 2.9$</p>	<p>10. $\left(\frac{3}{4}z - \frac{3}{8}\right) + \left(\frac{1}{4}z + \frac{7}{8}\right)$</p> <p>$z + \frac{1}{2}$</p>
<p>11. $(-3.1a + 5.26) + (-2.5a + 4.75b - 12.4)$</p> <p>$-5.6a + 4.75b - 7.14$</p>	<p>12. $\left(\frac{2}{5}x - \frac{5}{6}y - 9\right) + \left(-\frac{4}{5}x + 4\right)$</p> <p>$-\frac{2}{5}x - \frac{5}{6}y - 5$</p>