

## Combining like terms

1. Simplify each expression by combining like terms.

a)  $3a + 2a$       b)  $5x - 3x$       c)  $2x^2 + 4x^2$

d)  $\frac{3}{7} + \frac{2}{7}$       e)  $\frac{5}{11} - \frac{3}{11}$       f)  $\frac{2}{x^2} + \frac{4}{x^2}$

g)  $5a - 3a + 4a$       h)  $-x + 3x - 9x$

2. Simplify each expression.

a)  $3x + 2x - 4 - 1$       b)  $2x - 3 + x - 4$

c)  $-4 - 3a + 1 - 2a$       d)  $\frac{2}{7} - \frac{3}{5} + \frac{1}{7} - \frac{4}{5}$

e)  $7x - 5 - 3x - 2 + x$       f)  $2a - (-4) + (-a) - 1$

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1. Simplify each expression by combining like terms.

$$\text{a) } 3a + 2a \\ \textcircled{5a}$$

$$\text{b) } 5x - 3x \\ \textcircled{2x}$$

$$\text{c) } 2x^2 + 4x^2 \\ \textcircled{6x^2}$$

$$\text{d) } \frac{3}{7} + \frac{2}{7} \\ \textcircled{\frac{5}{7}}$$

$$\text{e) } \frac{5}{11} - \frac{3}{11} \\ \textcircled{\frac{2}{11}}$$

$$\text{f) } \frac{2}{x^2} + \frac{4}{x^2} \\ \textcircled{\frac{6}{x^2}}$$

$$\text{g) } \underline{5a - 3a} + 4a \\ \quad \quad \quad 2a + 4a \\ \quad \quad \quad \textcircled{6a}$$

$$\text{h) } \underline{-x + 3x} - 9x \\ \quad \quad \quad 2x - 9x \\ \quad \quad \quad \textcircled{-7x}$$

2. Simplify each expression.

$$\text{a) } \textcircled{3x} + \textcircled{2x} - \textcircled{4} - \textcircled{1} \\ \boxed{5x - 5}$$

$$\text{b) } \textcircled{2x} - \textcircled{3} + \textcircled{x} - \textcircled{4} \\ \boxed{3x - 7}$$

$$\text{c) } -\textcircled{4} - \textcircled{3a} + \textcircled{1} - \textcircled{2a} \\ \boxed{a - 3}$$

$$\text{d) } \textcircled{\frac{2}{7}} - \textcircled{\frac{3}{5}} + \textcircled{\frac{1}{7}} - \textcircled{\frac{4}{5}} \\ \frac{3}{7} - \frac{7}{5} = \boxed{-\frac{34}{35}}$$

$$\text{e) } \textcircled{7x} - \textcircled{5} - \textcircled{3x} - \textcircled{2} + \textcircled{x} \\ \boxed{5x - 7}$$

$$\text{f) } 2a - (-\textcircled{4}) + (-\textcircled{a}) - \textcircled{1} \\ \textcircled{2a} + \textcircled{4} - \textcircled{a} - \textcircled{1} \\ \boxed{a + 3}$$