

Nom: \_\_\_\_\_

## La distributivité et les termes semblables – Exercice #2

i. Simplifie chaque expression (Développe si nécessaire).

$$\begin{aligned} \text{a) } 8n - n \\ = 7n \end{aligned}$$

$$\begin{aligned} \text{b) } -v - v \\ = -2v \end{aligned}$$

$$\begin{aligned} \text{c) } -9x + 4x \\ = -5x \end{aligned}$$

$$\begin{aligned} \text{d) } -8p - 2p \\ = -10p \end{aligned}$$

$$\begin{aligned} \text{e) } 10m + m \\ = 11m \end{aligned}$$

$$\begin{aligned} \text{f) } -2x - 3 - 10x \\ = -12x - 3 \end{aligned}$$

$$\begin{aligned} \text{g) } -a + 5a \\ = 4a \end{aligned}$$

$$\begin{aligned} \text{h) } 1 + \frac{3k}{1+3} - 8 + \frac{1}{3}k \\ = -7 + \frac{10}{3}k \end{aligned}$$

$$\begin{aligned} \text{i) } -5x - 4 + x + 7 \\ = -4x + 3 \end{aligned}$$

$$\begin{aligned} \text{j) } 6(6 + 5m) \\ = 36 + 30m \end{aligned}$$

$$\begin{aligned} \text{k) } -\frac{1}{2}(4 - 8n) \\ = -2 + 4n \end{aligned}$$

$$\begin{aligned} \text{l) } -9(1 - 3x) - 1 \\ = -9 + 27x - 1 \\ = -10 + 27x \end{aligned}$$

$$\begin{aligned} \text{m) } -7(8x - 5) + 6x \\ = -56x + 35 + 6x \\ = -50x + 35 \end{aligned}$$

$$\begin{aligned} \text{n) } -3 + 6(x + 4) \\ = -3 + 6x + 24 \\ = 21 + 6x \end{aligned}$$

$$\begin{aligned} \text{o) } 4 + 8(x - 7) \\ = 4 + 8x - 56 \\ = 8x - 52 \end{aligned}$$

$$\begin{aligned} \text{p) } -\frac{3}{2}a + 7(a + 8) \\ = -\frac{3}{2}a + \frac{7a}{1 \times 2} + 56 \\ = \frac{-3a + 14a}{2} + 56 \\ = \frac{11a}{2} + 56 \end{aligned}$$

$$\begin{aligned} \text{q) } 10n - 3(1 + 8n) \\ = 10n - 3 - 24n \\ = -14n - 3 \end{aligned}$$

$$\begin{aligned} \text{r) } -1 - 4(10c - 7) \\ = -1 - 40c + 28 \\ = 27 - 40c \end{aligned}$$

$$\begin{aligned} \text{s) } 2(r - 2) + \frac{2}{3}(-4r + 1) \\ = \frac{2r}{1 \times 3} - \frac{4}{1 \times 3} - \frac{8r}{3} + \frac{2}{3} \end{aligned}$$

$$\begin{aligned} \text{t) } 9(v - 1) - 2(v - 8) \\ = 9v - 9 - 2v + 16 \\ = 7v + 7 \end{aligned}$$

$$= \frac{6r}{3} - \frac{12}{3} - \frac{8r}{3} + \frac{2}{3}$$

$$= \frac{-2r - 10}{3}$$

$$\begin{aligned}
 \text{u)} & 3(-10r - 2) + 8(7 - 6r) \\
 & = -30r - 6 + 56 - 48r \\
 & = -78r + 50
 \end{aligned}$$

$$\begin{aligned}
 \text{w)} & -3(n + 1) - 6(1 + 6n) \\
 & = -3n - 3 - 6 - 36n \\
 & = -39n - 9
 \end{aligned}$$

$$\begin{aligned}
 \text{y)} & 1 + 2\left(\frac{1}{2}x + 6\right) - 1(8x - 1) \\
 & = 1 + x + 12 - 8x + 1 \\
 & = 14 - 7x
 \end{aligned}$$

$$\begin{aligned}
 \text{v)} & -4(1 + 5x) - 6(2x + 1) \\
 & = -4 - 20x - 12x - 6 \\
 & = -10 - 32x
 \end{aligned}$$

$$\begin{aligned}
 \text{x)} & -(n - 2) + 8\left(\frac{5}{2}n - 5\right) \\
 & = -n + 2 + 20n - 40 \\
 & = 19n - 38
 \end{aligned}$$

$$\begin{aligned}
 \text{z)} & 7a(a - 9) - 4(4a + 3) \\
 & = 7a^2 - 63a - 16a - 12 \\
 & = 7a^2 - 79a - 12
 \end{aligned}$$