

Simplification d'Expressions (A)

Simplifiez chaque expression.

1. $10y^2 + y + y^2 - 2$

6. $-8x^2 - 1 + 1 - x^2$

2. $y^2 - 2y^2 + 10 + 1$

7. $c^2 - 1 - c - 8c$

3. $10v - v^2 + 3 + v$

8. $3z + z + 10z^2 + z$

4. $-5 - v + 6v^2 + 1$

9. $-1 - 9 + 2x + 2x^2$

5. $1 - 1 - z - 5$

10. $-c^2 - 1 + 5c - 3c$

Simplification d'Expressions (A) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & 10y^2 + y + y^2 - 2 \\ &= 11y^2 + y - 2 \end{aligned}$$

$$\begin{aligned} 6. & -8x^2 - 1 + 1 - x^2 \\ &= -9x^2 \end{aligned}$$

$$\begin{aligned} 2. & y^2 - 2y^2 + 10 + 1 \\ &= -y^2 + 11 \end{aligned}$$

$$\begin{aligned} 7. & c^2 - 1 - c - 8c \\ &= c^2 - 9c - 1 \end{aligned}$$

$$\begin{aligned} 3. & 10v - v^2 + 3 + v \\ &= -v^2 + 11v + 3 \end{aligned}$$

$$\begin{aligned} 8. & 3z + z + 10z^2 + z \\ &= 10z^2 + 5z \end{aligned}$$

$$\begin{aligned} 4. & -5 - v + 6v^2 + 1 \\ &= 6v^2 - v - 4 \end{aligned}$$

$$\begin{aligned} 9. & -1 - 9 + 2x + 2x^2 \\ &= 2x^2 + 2x - 10 \end{aligned}$$

$$\begin{aligned} 5. & 1 - 1 - z - 5 \\ &= -z - 5 \end{aligned}$$

$$\begin{aligned} 10. & -c^2 - 1 + 5c - 3c \\ &= -c^2 + 2c - 1 \end{aligned}$$

Simplification d'Expressions (B)

Simplifiez chaque expression.

1. $2c^2 + 5c + 7 + 1$

6. $-y^2 + y + 10y^2 - 1$

2. $-y^2 - y^2 + 5y + y^2$

7. $-a - 1 - a^2 + a$

3. $c^2 + 7 + 5c^2 + c^2$

8. $-y^2 + y - 7y^2 + y^2$

4. $10 + a + a^2 + a^2$

9. $-v + v - 3v^2 - 2v^2$

5. $-10y + 5y^2 - y - 7y^2$

10. $c^2 - 8c + 5c^2 + 1$

Simplification d'Expressions (B) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & 2c^2 + 5c + 7 + 1 \\ & = 2c^2 + 5c + 8 \end{aligned}$$

$$\begin{aligned} 6. & -y^2 + y + 10y^2 - 1 \\ & = 9y^2 + y - 1 \end{aligned}$$

$$\begin{aligned} 2. & -y^2 - y^2 + 5y + y^2 \\ & = -y^2 + 5y \end{aligned}$$

$$\begin{aligned} 7. & -a - 1 - a^2 + a \\ & = -a^2 - 1 \end{aligned}$$

$$\begin{aligned} 3. & c^2 + 7 + 5c^2 + c^2 \\ & = 7c^2 + 7 \end{aligned}$$

$$\begin{aligned} 8. & -y^2 + y - 7y^2 + y^2 \\ & = -7y^2 + y \end{aligned}$$

$$\begin{aligned} 4. & 10 + a + a^2 + a^2 \\ & = 2a^2 + a + 10 \end{aligned}$$

$$\begin{aligned} 9. & -v + v - 3v^2 - 2v^2 \\ & = -5v^2 \end{aligned}$$

$$\begin{aligned} 5. & -10y + 5y^2 - y - 7y^2 \\ & = -2y^2 - 11y \end{aligned}$$

$$\begin{aligned} 10. & c^2 - 8c + 5c^2 + 1 \\ & = 6c^2 - 8c + 1 \end{aligned}$$

Simplification d'Expressions (C)

Simplifiez chaque expression.

1. $-a + a^2 - a + 1$

6. $y + 1 + 4y + 4y$

2. $a^2 + 1 - 3 + 9$

7. $-z^2 - 1 - 6 - z^2$

3. $2z^2 - 5 + z + 1$

8. $7 + 2 - 10a^2 - 7$

4. $9c + c + c^2 + 7c$

9. $-y^2 + 6y + y^2 + 5y^2$

5. $b + 9b + b + 5b^2$

10. $z + z + 1 + z$

Simplification d'Expressions (C) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & -a + a^2 - a + 1 \\ & = a^2 - 2a + 1 \end{aligned}$$

$$\begin{aligned} 6. & y + 1 + 4y + 4y \\ & = 9y + 1 \end{aligned}$$

$$\begin{aligned} 2. & a^2 + 1 - 3 + 9 \\ & = a^2 + 7 \end{aligned}$$

$$\begin{aligned} 7. & -z^2 - 1 - 6 - z^2 \\ & = -2z^2 - 7 \end{aligned}$$

$$\begin{aligned} 3. & 2z^2 - 5 + z + 1 \\ & = 2z^2 + z - 4 \end{aligned}$$

$$\begin{aligned} 8. & 7 + 2 - 10a^2 - 7 \\ & = -10a^2 + 2 \end{aligned}$$

$$\begin{aligned} 4. & 9c + c + c^2 + 7c \\ & = c^2 + 17c \end{aligned}$$

$$\begin{aligned} 9. & -y^2 + 6y + y^2 + 5y^2 \\ & = 5y^2 + 6y \end{aligned}$$

$$\begin{aligned} 5. & b + 9b + b + 5b^2 \\ & = 5b^2 + 11b \end{aligned}$$

$$\begin{aligned} 10. & z + z + 1 + z \\ & = 3z + 1 \end{aligned}$$

Simplification d'Expressions (D)

Simplifiez chaque expression.

1. $-8 - 1 + 7y^2 + 10y$

6. $-3v^2 + 5 + 1 + 1$

2. $2 + c + 1 - 4c^2$

7. $-x + 3x^2 - x + 3x^2$

3. $1 + z - z^2 + 9$

8. $-a^2 - 10a^2 - a^2 + 4$

4. $-b + 1 + 1 + 1$

9. $-5c + c + c^2 + c$

5. $v^2 - 8v^2 + v + 6$

10. $6a + 4a + 5a + 3a^2$

Simplification d'Expressions (D) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & -8 - 1 + 7y^2 + 10y \\ & = 7y^2 + 10y - 9 \end{aligned}$$

$$\begin{aligned} 6. & -3v^2 + 5 + 1 + 1 \\ & = -3v^2 + 7 \end{aligned}$$

$$\begin{aligned} 2. & 2 + c + 1 - 4c^2 \\ & = -4c^2 + c + 3 \end{aligned}$$

$$\begin{aligned} 7. & -x + 3x^2 - x + 3x^2 \\ & = 6x^2 - 2x \end{aligned}$$

$$\begin{aligned} 3. & 1 + z - z^2 + 9 \\ & = -z^2 + z + 10 \end{aligned}$$

$$\begin{aligned} 8. & -a^2 - 10a^2 - a^2 + 4 \\ & = -12a^2 + 4 \end{aligned}$$

$$\begin{aligned} 4. & -b + 1 + 1 + 1 \\ & = -b + 3 \end{aligned}$$

$$\begin{aligned} 9. & -5c + c + c^2 + c \\ & = c^2 - 3c \end{aligned}$$

$$\begin{aligned} 5. & v^2 - 8v^2 + v + 6 \\ & = -7v^2 + v + 6 \end{aligned}$$

$$\begin{aligned} 10. & 6a + 4a + 5a + 3a^2 \\ & = 3a^2 + 15a \end{aligned}$$

Simplification d'Expressions (E)

Simplifiez chaque expression.

1. $1 + z^2 + z + 7z$

6. $1 - x^2 + 1 + 8$

2. $5z + z^2 - z^2 - 1$

7. $-x^2 + x + 1 + 3x$

3. $a^2 + a - 1 + a^2$

8. $1 + 10c^2 + 7c + 6c^2$

4. $1 + 1 - 3 + 4c$

9. $8a^2 + a + 3a - 1$

5. $b - 8b^2 + b^2 + b$

10. $1 + c - 10c^2 - 6c^2$

Simplification d'Expressions (E) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. \quad & 1 + z^2 + z + 7z \\ & = z^2 + 8z + 1 \end{aligned}$$

$$\begin{aligned} 6. \quad & 1 - x^2 + 1 + 8 \\ & = -x^2 + 10 \end{aligned}$$

$$\begin{aligned} 2. \quad & 5z + z^2 - z^2 - 1 \\ & = 5z - 1 \end{aligned}$$

$$\begin{aligned} 7. \quad & -x^2 + x + 1 + 3x \\ & = -x^2 + 4x + 1 \end{aligned}$$

$$\begin{aligned} 3. \quad & a^2 + a - 1 + a^2 \\ & = 2a^2 + a - 1 \end{aligned}$$

$$\begin{aligned} 8. \quad & 1 + 10c^2 + 7c + 6c^2 \\ & = 16c^2 + 7c + 1 \end{aligned}$$

$$\begin{aligned} 4. \quad & 1 + 1 - 3 + 4c \\ & = 4c - 1 \end{aligned}$$

$$\begin{aligned} 9. \quad & 8a^2 + a + 3a - 1 \\ & = 8a^2 + 4a - 1 \end{aligned}$$

$$\begin{aligned} 5. \quad & b - 8b^2 + b^2 + b \\ & = -7b^2 + 2b \end{aligned}$$

$$\begin{aligned} 10. \quad & 1 + c - 10c^2 - 6c^2 \\ & = -16c^2 + c + 1 \end{aligned}$$

Simplification d'Expressions (F)

Simplifiez chaque expression.

1. $y^2 + y + 6y + y$

6. $x^2 + 8x - 1 - x^2$

2. $y + y^2 - y + 10y$

7. $a^2 + a^2 + 1 + 3a$

3. $-u^2 + 1 + u^2 - u$

8. $a^2 + 4a - a + 8a^2$

4. $8c^2 + c - 3 + 1$

9. $1 - 5c^2 + 1 - c$

5. $u + 4 + u^2 + 2$

10. $6u - u + 2 + 1$

Simplification d'Expressions (F) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & y^2 + y + 6y + y \\ & = y^2 + 8y \end{aligned}$$

$$\begin{aligned} 6. & x^2 + 8x - 1 - x^2 \\ & = 8x - 1 \end{aligned}$$

$$\begin{aligned} 2. & y + y^2 - y + 10y \\ & = y^2 + 10y \end{aligned}$$

$$\begin{aligned} 7. & a^2 + a^2 + 1 + 3a \\ & = 2a^2 + 3a + 1 \end{aligned}$$

$$\begin{aligned} 3. & -u^2 + 1 + u^2 - u \\ & = -u + 1 \end{aligned}$$

$$\begin{aligned} 8. & a^2 + 4a - a + 8a^2 \\ & = 9a^2 + 3a \end{aligned}$$

$$\begin{aligned} 4. & 8c^2 + c - 3 + 1 \\ & = 8c^2 + c - 2 \end{aligned}$$

$$\begin{aligned} 9. & 1 - 5c^2 + 1 - c \\ & = -5c^2 - c + 2 \end{aligned}$$

$$\begin{aligned} 5. & u + 4 + u^2 + 2 \\ & = u^2 + u + 6 \end{aligned}$$

$$\begin{aligned} 10. & 6u - u + 2 + 1 \\ & = 5u + 3 \end{aligned}$$

Simplification d'Expressions (G)

Simplifiez chaque expression.

1. $-2 + x + 9 + 1$

6. $-z + 10z^2 + 2z - z^2$

2. $z - 6 + z + 3z^2$

7. $1 + a^2 - 1 + 10$

3. $-c^2 + c + 7 - 7c^2$

8. $-2 + u^2 + 2u - u^2$

4. $z^2 - z + z^2 + 6z^2$

9. $8 + a^2 - a + 9a$

5. $-1 + 9z^2 - 7 + 5$

10. $-u + u^2 + 9u^2 + u$

Simplification d'Expressions (G) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & -2 + x + 9 + 1 \\ & = x + 8 \end{aligned}$$

$$\begin{aligned} 6. & -z + 10z^2 + 2z - z^2 \\ & = 9z^2 + z \end{aligned}$$

$$\begin{aligned} 2. & z - 6 + z + 3z^2 \\ & = 3z^2 + 2z - 6 \end{aligned}$$

$$\begin{aligned} 7. & 1 + a^2 - 1 + 10 \\ & = a^2 + 10 \end{aligned}$$

$$\begin{aligned} 3. & -c^2 + c + 7 - 7c^2 \\ & = -8c^2 + c + 7 \end{aligned}$$

$$\begin{aligned} 8. & -2 + u^2 + 2u - u^2 \\ & = 2u - 2 \end{aligned}$$

$$\begin{aligned} 4. & z^2 - z + z^2 + 6z^2 \\ & = 8z^2 - z \end{aligned}$$

$$\begin{aligned} 9. & 8 + a^2 - a + 9a \\ & = a^2 + 8a + 8 \end{aligned}$$

$$\begin{aligned} 5. & -1 + 9z^2 - 7 + 5 \\ & = 9z^2 - 3 \end{aligned}$$

$$\begin{aligned} 10. & -u + u^2 + 9u^2 + u \\ & = 10u^2 \end{aligned}$$

Simplification d'Expressions (H)

Simplifiez chaque expression.

1. $1 - 1 + z + 5z^2$

6. $-x^2 + 4x + 8 + x^2$

2. $3y + 1 + y^2 - 1$

7. $y^2 - 1 + 10 - 1$

3. $-5u - u^2 + u^2 + u$

8. $-c + 1 + 3c^2 + c^2$

4. $2 + 9z^2 - z^2 + z$

9. $9 + 4c^2 - 10 + 7$

5. $-v^2 - 1 + 9v + v$

10. $-1 - 3v + 1 - 6v$

Simplification d'Expressions (H) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. \quad & 1 - 1 + z + 5z^2 \\ & = 5z^2 + z \end{aligned}$$

$$\begin{aligned} 6. \quad & -x^2 + 4x + 8 + x^2 \\ & = 4x + 8 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3y + 1 + y^2 - 1 \\ & = y^2 + 3y \end{aligned}$$

$$\begin{aligned} 7. \quad & y^2 - 1 + 10 - 1 \\ & = y^2 + 8 \end{aligned}$$

$$\begin{aligned} 3. \quad & -5u - u^2 + u^2 + u \\ & = -4u \end{aligned}$$

$$\begin{aligned} 8. \quad & -c + 1 + 3c^2 + c^2 \\ & = 4c^2 - c + 1 \end{aligned}$$

$$\begin{aligned} 4. \quad & 2 + 9z^2 - z^2 + z \\ & = 8z^2 + z + 2 \end{aligned}$$

$$\begin{aligned} 9. \quad & 9 + 4c^2 - 10 + 7 \\ & = 4c^2 + 6 \end{aligned}$$

$$\begin{aligned} 5. \quad & -v^2 - 1 + 9v + v \\ & = -v^2 + 10v - 1 \end{aligned}$$

$$\begin{aligned} 10. \quad & -1 - 3v + 1 - 6v \\ & = -9v \end{aligned}$$

Simplification d'Expressions (I)

Simplifiez chaque expression.

1. $9x - 9x - 4x - x^2$

6. $1 + z^2 + 1 + z$

2. $8 + 4a - 5a^2 + 7a^2$

7. $-9 - 7v^2 + 6 + 1$

3. $-3a + 8a^2 - a^2 - a^2$

8. $-6 + v + v + 1$

4. $2u^2 + 1 + 8u + 1$

9. $6b + 4b - 1 - 9b$

5. $-7y^2 + y^2 + 1 - 9y$

10. $x^2 + 3x^2 - 10 + 2x$

Simplification d'Expressions (I) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. \quad & 9x - 9x - 4x - x^2 \\ & = -x^2 - 4x \end{aligned}$$

$$\begin{aligned} 6. \quad & 1 + z^2 + 1 + z \\ & = z^2 + z + 2 \end{aligned}$$

$$\begin{aligned} 2. \quad & 8 + 4a - 5a^2 + 7a^2 \\ & = 2a^2 + 4a + 8 \end{aligned}$$

$$\begin{aligned} 7. \quad & -9 - 7v^2 + 6 + 1 \\ & = -7v^2 - 2 \end{aligned}$$

$$\begin{aligned} 3. \quad & -3a + 8a^2 - a^2 - a^2 \\ & = 6a^2 - 3a \end{aligned}$$

$$\begin{aligned} 8. \quad & -6 + v + v + 1 \\ & = 2v - 5 \end{aligned}$$

$$\begin{aligned} 4. \quad & 2u^2 + 1 + 8u + 1 \\ & = 2u^2 + 8u + 2 \end{aligned}$$

$$\begin{aligned} 9. \quad & 6b + 4b - 1 - 9b \\ & = b - 1 \end{aligned}$$

$$\begin{aligned} 5. \quad & -7y^2 + y^2 + 1 - 9y \\ & = -6y^2 - 9y + 1 \end{aligned}$$

$$\begin{aligned} 10. \quad & x^2 + 3x^2 - 10 + 2x \\ & = 4x^2 + 2x - 10 \end{aligned}$$

Simplification d'Expressions (J)

Simplifiez chaque expression.

1. $-9 + 5 + 4v + 5$

6. $z + z + 10 + 1$

2. $8 + 5x + 9x^2 + 8x^2$

7. $2 - 3u - u + u$

3. $-u^2 + 10u^2 + u + 3u$

8. $10b^2 - b - 9b - 1$

4. $-4b - b + 6b - b^2$

9. $v - v^2 + 1 + v^2$

5. $-1 - 10a + 5 + a^2$

10. $-8v + 5 - 8 + 1$

Simplification d'Expressions (J) Solutions

Simplifiez chaque expression.

$$\begin{aligned} 1. & -9 + 5 + 4v + 5 \\ & = 4v + 1 \end{aligned}$$

$$\begin{aligned} 6. & z + z + 10 + 1 \\ & = 2z + 11 \end{aligned}$$

$$\begin{aligned} 2. & 8 + 5x + 9x^2 + 8x^2 \\ & = 17x^2 + 5x + 8 \end{aligned}$$

$$\begin{aligned} 7. & 2 - 3u - u + u \\ & = -3u + 2 \end{aligned}$$

$$\begin{aligned} 3. & -u^2 + 10u^2 + u + 3u \\ & = 9u^2 + 4u \end{aligned}$$

$$\begin{aligned} 8. & 10b^2 - b - 9b - 1 \\ & = 10b^2 - 10b - 1 \end{aligned}$$

$$\begin{aligned} 4. & -4b - b + 6b - b^2 \\ & = -b^2 + b \end{aligned}$$

$$\begin{aligned} 9. & v - v^2 + 1 + v^2 \\ & = v + 1 \end{aligned}$$

$$\begin{aligned} 5. & -1 - 10a + 5 + a^2 \\ & = a^2 - 10a + 4 \end{aligned}$$

$$\begin{aligned} 10. & -8v + 5 - 8 + 1 \\ & = -8v - 2 \end{aligned}$$