

# Identifying equivalent algebraic expressions: Worksheet 8.1

Name ..... Date ..... Score .....

For each expression, select **all** equivalent expressions from the list

1.  $24x - 18$

- A.  $6(4x - 3)$    B. 6   C.  $4(6x - 4)$    D.  $12x - 9$

2.  $x + x + x + x$

- A.  $4x$    B.  $x + 4$    C.  $2x + 2x$    D.  $3x - x$

3.  $6x + 9y$

- A.  $6(x + 3y)$    B.  $3(2x + 3y)$    C.  $9x + 6y$    D.  $6x - 9y$

4.  $10x - 15y$

- A.  $5x - 15y$    B.  $10x + 15y$    C.  $5(2x + 3y)$    D.  $5(2x - 3y)$

5.  $7x^2 + 21$

- A.  $7x^2 - 21$    B.  $x^2 + 21$    C.  $7(x^2 + 3)$    D.  $7x^2 + 1$

6.  $8x^2 + 2x$

- A.  $8x^2 + x$    B.  $2x(4x + 1)$    C.  $2(4x^2 + x)$    D.  $8x^2 - 2x$

7.  $12xy + 15x$

- A.  $12xy - 15x$    B.  $3x(4y + 5)$    C.  $12yz + 15x$    D.  $3x(5y + 4)$

8.  $9x + x^2$

- A.  $9x - x^2$    B.  $x(9 + x)$    C.  $x(9 - x)$    D.  $9x^2 + x$

9.  $y + 3y + 2y$

- A.  $6y$    B.  $y + 6$    C.  $2y + 4y$    D.  $6y - y$

10.  $4xyz + 5xy$

- A.  $5xyz + 4xy$    B.  $xy(4z + 5)$    C.  $x(4yz + 5y)$    D.  $4xyz - 5xy$



## Solutions: Worksheet 8.1

1. A
2. A, C
3. B
4. D
5. C
6. B, C
7. B
8. B
9. A, C
10. B, C