

## Exercises – Factoring Using the Distributive Property

1

$$1 + 2x - x(1 + 2x)$$

Which of the following is equivalent to the expression shown above?

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

2

What is the value of  $x$ , if  $rx + sx = 3$  and  $r + s = \frac{1}{3}$ ?

- A) 1
- B) 3
- C) 9
- D) 27

3

$$2ax - 6a - 3x + 9$$

Which of the following is equivalent to the expression shown above?

- A)  $(2a - 1)(x - 9)$
- B)  $(2a - 3)(2x - 3)$
- C)  $(a - 3)(2x - 3)$
- D)  $(2a - 3)(x - 3)$

4

$$mn - 5n - m + 5$$

Which of the following is equivalent to the expression shown above?

- A)  $(m - 5)(n - 1)$
- B)  $(m - 1)(n - 5)$
- C)  $(m + 5)(n + 1)$
- D)  $(m - 5)(5n - 1)$

5

$$7y^2 - 21xy - 2y + 6x$$

Which of the following is equivalent to the expression shown above?

- A)  $(7y - 3)(y - 2x)$
- B)  $(7y - 2)(2y - 3x)$
- C)  $(7y - 2)(y - 3x)$
- D)  $(7y + 2)(2y - 3x)$

6

$$x - 2y + 3z - 2wx + 4wy - 6wz$$

Which of the following is equivalent to the expression shown above?

- A)  $(1 + 2w)(x + 2y - 3z)$
- B)  $(1 - 2w)(x - 2y + 3z)$
- C)  $(1 + 2w)(x - 2y - 3z)$
- D)  $(1 - 2w)(x - y - 3z)$