

## Multiplying a Monomial by a Binomial (J)

Simplify each expression.

1.  $-3f^2(5f + 4)$

2.  $-7r^5(-4r^3 - r^2)$

3.  $-3s^5(2s^5 - s^4)$

4.  $-8a^2(-8a^3 + 8a^2)$

5.  $-9k^5(-3k - 6)$

6.  $b(4b^2 - 7b)$

7.  $-7f^3(3f - 3)$

8.  $-a^2(-5a - 3)$

9.  $8y(y^3 + 3y^2)$

10.  $2q^3(7q^4 + 8q^3)$

## Multiplying a Monomial by a Binomial (J) Answers

Simplify each expression.

$$\begin{aligned} 1. & -3f^2(5f + 4) \\ & = -15f^3 - 12f^2 \end{aligned}$$

$$\begin{aligned} 2. & -7r^5(-4r^3 - r^2) \\ & = 28r^8 + 7r^7 \end{aligned}$$

$$\begin{aligned} 3. & -3s^5(2s^5 - s^4) \\ & = -6s^{10} + 3s^9 \end{aligned}$$

$$\begin{aligned} 4. & -8a^2(-8a^3 + 8a^2) \\ & = 64a^5 - 64a^4 \end{aligned}$$

$$\begin{aligned} 5. & -9k^5(-3k - 6) \\ & = 27k^6 + 54k^5 \end{aligned}$$

$$\begin{aligned} 6. & b(4b^2 - 7b) \\ & = 4b^3 - 7b^2 \end{aligned}$$

$$\begin{aligned} 7. & -7f^3(3f - 3) \\ & = -21f^4 + 21f^3 \end{aligned}$$

$$\begin{aligned} 8. & -a^2(-5a - 3) \\ & = 5a^3 + 3a^2 \end{aligned}$$

$$\begin{aligned} 9. & 8y(y^3 + 3y^2) \\ & = 8y^4 + 24y^3 \end{aligned}$$

$$\begin{aligned} 10. & 2q^3(7q^4 + 8q^3) \\ & = 14q^7 + 16q^6 \end{aligned}$$