

Multiplying Two Trinomials (F)

Simplify each expression.

$$1. (8f^4 - 6f^3 + 3f^2)(-7f^5 + f^4 - 4f^3)$$

$$2. (2q^5 - 6q^4 - 5q^3)(-7q^5 + 7q^4 - 5q^3)$$

$$3. (-7k^4 - 2k^3 - 9k^2)(6k^5 + 9k^4 + 3k^3)$$

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

$$5. (-8z^4 - 2z^3 - 5z^2)(-3z^4 + 7z^3 - z^2)$$

$$6. (-2d^2 - 5d - 3)(-7d^4 + d^3 - 8d^2)$$

$$7. (-7s^2 + 7s + 9)(5s^5 + 3s^4 - 5s^3)$$

$$8. (-7a^2 + 5a + 3)(7a^4 - 7a^3 - 3a^2)$$

$$9. (-7g^2 - 6g + 7)(-g^3 - 2g^2 + 3g)$$

$$10. (-6d^2 + 8d + 2)(-4d^5 - 2d^4 - 2d^3)$$

Multiplying Two Trinomials (F) Answers

Simplify each expression.

$$1. (8f^4 - 6f^3 + 3f^2)(-7f^5 + f^4 - 4f^3)$$
$$= -56f^9 + 50f^8 - 59f^7 + 27f^6 - 12f^5$$

$$2. (2q^5 - 6q^4 - 5q^3)(-7q^5 + 7q^4 - 5q^3)$$
$$= -14q^{10} + 56q^9 - 17q^8 - 5q^7 + 25q^6$$

$$3. (-7k^4 - 2k^3 - 9k^2)(6k^5 + 9k^4 + 3k^3)$$
$$= -42k^9 - 75k^8 - 93k^7 - 87k^6 - 27k^5$$

$$4. (-3w^2 - 2w - 3)(-w^2 + 8w + 2)$$
$$= 3w^4 - 22w^3 - 19w^2 - 28w - 6$$

$$5. (-8z^4 - 2z^3 - 5z^2)(-3z^4 + 7z^3 - z^2)$$
$$= 24z^8 - 50z^7 + 9z^6 - 33z^5 + 5z^4$$

$$6. (-2d^2 - 5d - 3)(-7d^4 + d^3 - 8d^2)$$
$$= 14d^6 + 33d^5 + 32d^4 + 37d^3 + 24d^2$$

$$7. (-7s^2 + 7s + 9)(5s^5 + 3s^4 - 5s^3)$$
$$= -35s^7 + 14s^6 + 101s^5 - 8s^4 - 45s^3$$

$$8. (-7a^2 + 5a + 3)(7a^4 - 7a^3 - 3a^2)$$
$$= -49a^6 + 84a^5 + 7a^4 - 36a^3 - 9a^2$$

$$9. (-7g^2 - 6g + 7)(-g^3 - 2g^2 + 3g)$$
$$= 7g^5 + 20g^4 - 16g^3 - 32g^2 + 21g$$

$$10. (-6d^2 + 8d + 2)(-4d^5 - 2d^4 - 2d^3)$$
$$= 24d^7 - 20d^6 - 12d^5 - 20d^4 - 4d^3$$