

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

Multiplying Monomials and Polynomials

Distribute the monomial and combine like terms.

1. $9y^3(4x^2 + 3xy - 4y^2)$

2. $2(4x^2 - 3xz + 2z^2)$

3. $5y(-9y - 4z)$

4. $3(4p - 7)$

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

6. $3y^3(-3y^2 + 9y + 5)$

7. $7z(-3z - 4)$

8. $3z^2(-9n^2 + 7nz + 3z^2)$

9. $2(-7p + 4x)$

10. $9y(7m^2 + 6my - 3y^2)$

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

Multiplying Monomials and Polynomials

Answer key

Distribute the monomial and combine like terms.

1. $9y^3(4x^2 + 3xy - 4y^2)$

Distribute

$$36x^2y^3 + 27xy^4 - 36y^5$$

Collect like terms

$$36x^2y^3 + 27xy^4 - 36y^5$$

2. $2(4x^2 - 3xz + 2z^2)$

Distribute

$$8x^2 - 6xz + 4z^2$$

Collect like terms

$$8x^2 - 6xz + 4z^2$$

3. $5y(-9y - 4z)$

Distribute

$$-45y^2 - 20yz$$

Collect like terms

$$-45y^2 - 20yz$$

4. $3(4p - 7)$

Distribute

$$12p - 21$$

Collect like terms

$$12p - 21$$

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

Distribute

$$-21n^2 + 63n + 63$$

Collect like terms

$$-21n^2 + 63n + 63$$

6. $3y^3(-3y^2 + 9y + 5)$

Distribute

$$-9y^5 + 27y^4 + 15y^3$$

Collect like terms

$$-9y^5 + 27y^4 + 15y^3$$

7. $7z(-3z - 4)$

Distribute

$$-21z^2 - 28z$$

Collect like terms

$$-21z^2 - 28z$$

8. $3z^2(-9n^2 + 7nz + 3z^2)$

Distribute

$$-27n^2z^2 + 21nz^3 + 9z^4$$

Collect like terms

$$-27n^2z^2 + 21nz^3 + 9z^4$$

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

Multiplying Monomials and Polynomials

Answer key

Distribute the monomial and combine like terms.

9. $2(-7p + 4x)$

Distribute

$$-14p + 8x$$

Collect like terms

$$-14p + 8x$$

10. $9y(7m^2 + 6my - 3y^2)$

Distribute

$$63m^2y + 54my^2 - 27y^3$$

Collect like terms

$$63m^2y + 54my^2 - 27y^3$$