

Name : _____

Multiplying Monomials & Binomials

Single-variable: S1

Multiply the following.

1) $-2v^7(15v^6 + 46v^4)$

2) $\frac{1}{9}a^2(81a^5 - 72)$

3) $-4m^6(-7m^3 + 5m^6)$

4) $r^5(-3r - 8r^4)$

5) $13z^4(6z^7 + 4z^5)$

6) $-28d^3\left(-\frac{5}{28}d^2 - \frac{2}{7}d\right)$

7) $-\frac{2}{3}w^7\left(\frac{1}{3} - \frac{1}{5}w^7\right)$

8) $3(-p^4 + 10p^3)$

Name : _____

Answer key

Multiplying Monomials & Binomials

Single-variable: S1

Multiply the following.

1) $-2v^7(15v^6 + 46v^4)$

$-30v^{13} - 92v^{11}$

2) $\frac{1}{9}a^2(81a^5 - 72)$

$9a^7 - 8a^2$

3) $-4m^6(-7m^3 + 5m^6)$

$-20m^{12} + 28m^9$

4) $r^5(-3r - 8r^4)$

$-8r^9 - 3r^6$

5) $13z^4(6z^7 + 4z^5)$

$78z^{11} + 52z^9$

6) $-28d^3\left(-\frac{5}{28}d^2 - \frac{2}{7}d\right)$

$5d^5 + 8d^4$

7) $-\frac{2}{3}w^7\left(\frac{1}{3} - \frac{1}{5}w^7\right)$

$\frac{2}{15}w^{14} - \frac{2}{9}w^7$

8) $3(-p^4 + 10p^3)$

$-3p^4 + 30p^3$