

Name : _____

Multiplying Binomials

Single-variable: S1

Multiply the following.

1) $(-9p + 11)(6p - 3)$

2) $(-7q^6 - q^4)(-2q^2 - q^5)$

3) $(-5y^4 - y^5)(-8y^5 + 2y^6)$

4) $\left(\frac{7}{8}b - \frac{3}{4}\right)\left(\frac{6}{7}b^3 + 24\right)$

5) $(11w^6 + w^3)(5w^3 + 1)$

6) $(-2c + c^2)(-4c + c^2)$

7) $\left(\frac{4}{5}a^5 - 4a\right)\left(-\frac{1}{3}a^6 - \frac{5}{3}a^2\right)$

8) $(6x + 9)(6x - 9)$

Name : _____

Answer key

Multiplying Binomials

Single-variable: S1

Multiply the following.

1) $(-9p + 11)(6p - 3)$

$-54p^2 + 93p - 33$

2) $(-7q^6 - q^4)(-2q^2 - q^5)$

$7q^{11} + q^9 + 14q^8 + 2q^6$

3) $(-5y^4 - y^5)(-8y^5 + 2y^6)$

$-2y^{11} - 2y^{10} + 40y^9$

4) $\left(\frac{7}{8}b - \frac{3}{4}\right)\left(\frac{6}{7}b^3 + 24\right)$

$\frac{3}{4}b^4 - \frac{9}{14}b^3 + 21b - 18$

5) $(11w^6 + w^3)(5w^3 + 1)$

$55w^9 + 16w^6 + w^3$

6) $(-2c + c^2)(-4c + c^2)$

$c^4 - 6c^3 + 8c^2$

7) $\left(\frac{4}{5}a^5 - 4a\right)\left(-\frac{1}{3}a^6 - \frac{5}{3}a^2\right)$

$-\frac{4}{15}a^{11} + \frac{20}{3}a^3$

8) $(6x + 9)(6x - 9)$

$36x^2 - 81$