Multiplying Binomials

Multiply the binomials.

1) $(6 + m)(2 + n)(n - 1)$

_____

2) $(-3q - 1)(q - 4)(q + 1)$

_____

3) $(y + x^2)(3y + x^2)(x^2 + 2y)$

_____

4) $(a - 9)(2a^2 - 3)(6 - a^2)$

_____

5) $(k^2 - k)(-1 - 2k^3)(4k + 5)$

_____

6) $(u^2 - v^2)(u^2 + 5v^2)(2u^2 - v^2)$

_____

7) $(t + 8)(3 - t)(t - 7)$

_____

8) $(b + 3c)(c - b)(2b - 7c)$

_____

Multiplying Binomials

Name _____

Score _____

Answer key

MP:17

Multiply the binomials.

1) $(6 + m)(2 + n)(n - 1)$

$$mn^2 + 6n^2 + mn - 2m + 6n - 12$$

2) $(-3q - 1)(q - 4)(q + 1)$

$$-3q^3 + 8q^2 + 15q + 4$$

3) $(y + x^2)(3y + x^2)(x^2 + 2y)$

$$x^6 + 6x^4y + 11x^2y^2 + 6y^3$$

4) $(a - 9)(2a^2 - 3)(6 - a^2)$

$$-2a^5 + 18a^4 + 15a^3 - 135a^2 - 18a + 162$$

5) $(k^2 - k)(-1 - 2k^3)(4k + 5)$

$$-8k^6 - 2k^5 + 10k^4 - 4k^3 - k^2 + 5k$$

6) $(u^2 - v^2)(u^2 + 5v^2)(2u^2 - v^2)$

$$2u^6 + 7u^4v^2 - 14u^2v^4 + 5v^6$$

7) $(t + 8)(3 - t)(t - 7)$

$$-t^3 + 2t^2 + 59t - 168$$

8) $(b + 3c)(c - b)(2b - 7c)$

$$-2b^3 + 3b^2c + 20bc^2 - 21c^3$$