Multiplying Binomials

Name _____

Score _____

MP:16

Multiply the binomials.

1) $(2g + h^2)(g + h^2)(g - h^2)$

2) $(4w + uv)(3uv - w)(2uv + 7)$

3) $(3 - 4t)(t - 1)(6 + 7t)$

4) $(10 + a^2)(a^2 - 1)(2a^2 - 9)$

5) $(y + 2)(x - 8)(3 - z)$

6) $(7 + p)(3 + p)(q - 2)$

7) $(5 - d)(-1 - d^2)(d^3 + d)$

8) $(n^2 - 3)(n + 4)(n - n^3)$

Multiplying Binomials

Name _____

Score _____

Answer key

MP:16

Multiply the binomials.

1) $(2g + h^2)(g + h^2)(g - h^2)$

$-h^6 - 2gh^4 + g^2h^2 + 2g^3$

2) $(4w + uv)(3uv - w)(2uv + 7)$

$6u^3v^3 + 22u^2v^2w - 8uvw^2 + 21u^2v^2 + 77uvw - 28w^2$

3) $(3 - 4t)(t - 1)(6 + 7t)$

$-28t^3 + 25t^2 + 21t - 18$

4) $(10 + a^2)(a^2 - 1)(2a^2 - 9)$

$2a^6 + 9a^4 - 101a^2 + 90$

5) $(y + 2)(x - 8)(3 - z)$

$3xy - xyz - 24y + 8yz + 6x - 2xz - 48 + 16z$

6) $(7 + p)(3 + p)(q - 2)$

$p^2q - 2p^2 + 10pq - 20p + 21q - 42$

7) $(5 - d)(-1 - d^2)(d^3 + d)$

$d^6 - 5d^5 + 2d^4 - 10d^3 + d^2 - 5d$

8) $(n^2 - 3)(n + 4)(n - n^3)$

$-n^6 - 4n^5 + 4n^4 + 16n^3 - 3n^2 - 12n$