MULTIPLYING BINOMIALS WITH EXPONENTS

MATH MONKS

Multiply the following binomials.

1 $(10m^3 + n^4)(m^2n^2 - 9)$

2 $(-14h^5 - 6g^7)(8h^3 + 5g^4)$

3 $(-a^4b + d)(a^3c - ab)$

4 $(3r^6st + 4)(2r^6st - 6)$

5 $(5w^6 + 7)(11 - w^3)$

6 $(9q^7 - q^5)(-2q^6 - q^3)$

7 $(-5c + c^3)(c^3 + 7c^2)$

8 $(6x^4 - 9)(6x^4 + 9)$

MULTIPLYING BINOMIALS WITH EXPONENTS

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Answers

1 $(10m^3 + n^4)(m^2n^2 - 9)$

$10m^5n^2 - 90m^3 + n^6m^2 - 9n^4$

2 $(-14h^5 - 6g^7)(8h^3 + 5g^4)$

$-112h^8 - 70h^5g^4 - 48g^7h^3 - 30g^{11}$

3 $(-a^4b + d)(a^3c - ab)$

$-a^7bc + a^5b^2 + a^3dc - abd$

4 $(3r^6st + 4)(2r^6st - 6)$

$6r^{12}s^2t^2 - 10r^6st - 24$

5 $(5w^6 + 7)(11 - w^3)$

$-5w^9 + 55w^6 - 7w^3 + 77$

6 $(9q^7 - q^5)(-2q^6 - q^3)$

$-18q^{13} + 2q^{11} - 9q^{10} + q^8$

7 $(-5c + c^3)(c^3 + 7c^2)$

$c^6 + 7c^5 - 5c^4 - 35c^3$

8 $(6x^4 - 9)(6x^4 + 9)$

$36x^8 - 81$