



Dividing Polynomials

Name _____

Score _____

DP:08

Divide the polynomials.

1) $7p^5q^8r^7 \div 28p^2qr^4$

2) $(8a^6 + 6a^9) \div 2a^5$

3) $(-16z^5 - 24z^8 + 8z^9 - 32z^6) \div 8z^4$

4) $(5x^4y^6 + 6x^2y^8 - 9x^6y^6) \div 3x^2y^3$

5) $(b^5c^9d^4 - b^4c^3d^7 + b^3c^8d^9) \div b^2c^3d^4$

6) $20u^7v^5w^3 \div 10u^4v^4w^2$

7) $(63m^4n^5 - 36m^8n^7) \div 9m^3n^4$

8) $(4gh - 8g^4h^3 + 24g^3h^6) \div 4gh$



Dividing Polynomials

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Answer key

DP:08

Divide the polynomials.

1) $7p^5q^8r^7 \div 28p^2qr^4$

$$\frac{1}{4}p^3q^7r^3$$

3) $(-16z^5 - 24z^8 + 8z^9 - 32z^6) \div 8z^4$

$$z^4 - 3z^3 - 4z^2 - 2z$$

5) $(b^5c^9d^4 - b^4c^3d^7 + b^3c^8d^9) \div b^2c^3d^4$

$$bc^5d^5 + b^3c^6 - b^2d^3$$

7) $(63m^4n^5 - 36m^8n^7) \div 9m^3n^4$

$$-4m^5n^3 + 7mn$$

2) $(8a^6 + 6a^9) \div 2a^5$

$$3a^4 + 4a$$

4) $(5x^4y^6 + 6x^2y^8 - 9x^6y^6) \div 3x^2y^3$

$$-3x^4y^3 + \frac{5}{3}x^2y^3 + 2y^5$$

6) $20u^7v^5w^3 \div 10u^4v^4w^2$

$$2u^3vw$$

8) $(4gh - 8g^4h^3 + 24g^3h^6) \div 4gh$

$$6g^2h^5 - 2g^3h^2 + 4$$