

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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## Dividing Polynomials

Divide each polynomial. Put remainders in fractional form.

1)  $(3r^3 - 7r^2 + 10r + 6) \div (r - 9)$

6)  $(-2q^2 - 15q - 7) \div (q + 3)$

2)  $(-c^2 + 8c - 9) \div (c - 8)$

7)  $(-2z^3 - 17z^2 + 8z + 5) \div (z + 9)$

3)  $(-3h^2 - 5) \div (h + 4)$

8)  $(3s^2 + 20) \div (s - 2)$

4)  $(-2b^3 + 16b^2 + 16b + 12) \div (b - 3)$

9)  $(-4k^2 + 20) \div (k - 2)$

5)  $(4d^2 - 12d + 8) \div (d - 6)$

10)  $(-r^2 - 19r + 4) \div (r + 9)$

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## Dividing Polynomials

Divide each polynomial. Put remainders in fractional form.

1)  $(3r^3 - 7r^2 + 10r + 6) \div (r - 9)$

$$3r^2 + 20r + 190 + \frac{1716}{r - 9}$$

6)  $(-2q^2 - 15q - 7) \div (q + 3)$

$$-2q - 9 + \frac{20}{q + 3}$$

2)  $(-c^2 + 8c - 9) \div (c - 8)$

$$-c - \frac{9}{c - 8}$$

7)  $(-2z^3 - 17z^2 + 8z + 5) \div (z + 9)$

$$-2z^2 + z - 1 + \frac{14}{z + 9}$$

3)  $(-3h^2 - 5) \div (h + 4)$

$$-3h + 12 - \frac{53}{h + 4}$$

8)  $(3s^2 + 20) \div (s - 2)$

$$3s + 6 + \frac{32}{s - 2}$$

4)  $(-2b^3 + 16b^2 + 16b + 12) \div (b - 3)$

$$-2b^2 + 10b + 46 + \frac{150}{b - 3}$$

9)  $(-4k^2 + 20) \div (k - 2)$

$$-4k - 8 + \frac{4}{k - 2}$$

5)  $(4d^2 - 12d + 8) \div (d - 6)$

$$4d + 12 + \frac{80}{d - 6}$$

10)  $(-r^2 - 19r + 4) \div (r + 9)$

$$-r - 10 + \frac{94}{r + 9}$$