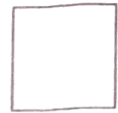


Name: _____

Unit 5: Polynomial Functions



Date: _____ Bell: _____

Homework 6: Dividing Polynomials

Directions: Use **factoring** to find the following quotients.

1. $\frac{x^2 + 8x - 84}{x - 6}$

2. $(6a^2 + 11a - 10) \div (3a - 2)$

Directions: Use **long division** to find the following quotients.

3. $(n^2 + 11n + 25) \div (n + 5)$

4. $(y^2 - 3y - 20) \div (y - 7)$

5. $(3k^2 - k - 20) \div (k + 2)$

6. $(x^3 + 2x^2 - 22x - 45) \div (x + 5)$

7. $(w^3 - 2w^2 - 2w + 1) \div (w - 1)$

8. $(2c^3 + 13c^2 + 24c + 8) \div (c + 3)$

9. $(m^3 - 12m^2 + 33m) \div (m - 5)$

10. $(2x^3 - 14x + 10) \div (x + 3)$

11. $(x^4 - 2x^3 - 29x^2 - 43x + 8) \div (x - 7)$

12. $(p^4 - 7p^2 - 32p - 15) \div (p - 4)$