

## Arithmetic with Polynomials - Worksheet 6

Write the following polynomial quotients in the form  $q(x) + \frac{r(x)}{b(x)}$ .

$$1. \frac{x^2 + 2x - 35}{x - 5}.$$

$$6. \frac{3x^3 + 5x^2}{x + 1}.$$

$$2. \frac{x^3 + 6x^2 - 8}{x^2 - 1}.$$

$$7. \frac{-x^3 + 3x}{x - 2}.$$

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

$$8. \frac{-4x^3 + 3x - 1}{x + 2}.$$

$$4. \frac{2x^2 + 3x - 1}{x - 1}.$$

$$9. \frac{-x^2 - 4x - 1}{x - 1}.$$

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

$$10. \frac{x^4 - 2x^2 - 3}{x + \sqrt{3}}$$

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