

More Polynomials - Answer Key

Just When You Thought It Was Safe to Get Back In the Water

1. Find the greatest common factor that can be cancelled from the numerator and denominator of $\frac{6x^3+12x}{6x^2+6x}$

$6x$.

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

$2x$.

3. Find the quotient of $\frac{x^3+3x^2+8x+10}{x+1}$

$(x+1)^2$.

4. Is $\frac{6x^3-x}{x^2+2x-x(x+2)}$ a rational expression

No, because the denominator is 0.

5. Find the quotient of $\frac{x^4+4x^3+6x^2+16x+10}{x^2+3}$

$x^2 + 4x + 3$.

6. Find the quotient of $\frac{3x^2+x-5}{x^2+x-5}$

3.

7. Simplify by factoring $\frac{2x^4+6x^3+6x+2x^2}{2x^2+6x}$

$x^2 + 1$.

8. Find the quotient $\frac{2x^3+6x^2+6x+3}{x+2}$

$2x^2 + 2x + 1$.

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

$x + 2$.

10. Simplify $\frac{3y^3-3y}{y-1}$

$3y(y+1)$.