

SM2 4.4—Division of Polynomials

Write the domain for each expression in interval notation.

1. $\frac{2x-1}{x}$

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

3. $\frac{(5x+4)(x-3)}{(x+7)(2x+1)}$

4. $\frac{x+1}{(x-3)(x+6)}$

5. $\frac{(x+3)(2x-5)}{(2x-5)(x+1)}$

6. $\frac{x+1}{3}$

Simplify. Write prime if the expression does not simplify.

7. $\frac{x+1}{(x+1)(x-2)}$

8. $\frac{(2x-3)(x-4)}{x-4}$

9. $\frac{5(x+3)}{5}$

10. $\frac{x^2(10x^2+3x-2)}{x^2}$

11. $\frac{(x-10)(3x-1)}{(2x-7)(x-10)}$

12. $\frac{(3x+4)(2x-5)}{3x+4}$

13. $\frac{5x-2}{(x-8)(5x-2)}$

14. $\frac{(x-4)(2x+3)}{(2x+3)(x+4)}$

15. $\frac{(2x+1)(x+3)}{(x+3)(x-5)}$