

Exercise Set 6.5

1. $\frac{5}{3}$ 3. 5 5. $\frac{5}{16}$ 7. $\frac{57}{32}$ 9. $\frac{11}{6}$ 11. $\frac{x^3y^2}{21}$ 13. $\frac{2ab^3}{21c^2}$ 15. $\frac{ab - a}{3 + a}$ 17. $\frac{3}{t}$ 19. $\frac{5x - 1}{4x - 1}$ 21. $\frac{m - n}{m}$

23. $-\frac{a}{b}$ 25. -1 27. 1 29. $b - a$ 31. $\frac{a^2 + b}{b(b + 1)}$ 33. $\frac{x^2y}{y - x}$ 35. $\frac{ab^2 + b^2}{a^2(b + 1)}$ 37. b)-c) $-\frac{224}{155}$ 39. b)-c) $\frac{x - y + 6}{2x + 2y - 7}$

41. a) $\frac{\frac{5}{12x}}{\frac{8}{x^2} - \frac{4}{3x}}$

b) $\frac{5x}{96 - 16x}$

43. A complex number is a fraction that contains a fraction in its numerator or its denominator or both.

45. $\frac{y + x}{3xy}$ 47. $x + y$ 49. a) $\frac{2}{7}$ b) $\frac{4}{13}$ 51. $\frac{a^3b + a^2b^3 - ab^2}{a^3 - ab^3 + 3b^2}$ 53. $\frac{17}{2}$ 54. A polynomial is an expression containing a finite

number of terms of the form ax^n where a is a real number and n is a whole number. 55. $(x - 5)(x - 8)$ 56. $\frac{x^2 - 9x + 2}{(3x - 1)(x + 6)(x - 3)}$

Exercise Set 6.6

1. Multiplication 2. Rational expression 5. Rational equation 7. Yes 9. 12 11. 6