

4.1 The Fundamental Property of Fractions.

Simplify:

$$\#28. \frac{24}{16} = \frac{24 \div 8}{16 \div 8} = \frac{3}{2}$$

$$\#30. -\frac{45}{54} = -\frac{45 \div 9}{54 \div 9} = -\frac{5}{6}$$

$$\#32. -\frac{26}{78} = -\frac{26 \div 2}{78 \div 2} = -\frac{13}{39} = -\frac{13 \div 13}{39 \div 13} = -\frac{1}{3}$$

$$\#40. \frac{48}{120} = \frac{48 \div 12}{120 \div 12} = \frac{4}{10} = \frac{4 \div 2}{10 \div 2} = \frac{2}{5}$$

$$\#46. \frac{4c}{5c} = \frac{4}{5}$$

$$\#48. \frac{10ab}{21ab} = \frac{10}{21}$$

$$\#52. \frac{16wx^3}{24x^3y} = \frac{2w}{3y}$$

$$\#54. \frac{35m^3n^4}{25m^4n^3} = \frac{35m \cdot m \cdot m \cdot n \cdot n \cdot n}{25m \cdot m \cdot m \cdot n \cdot n \cdot n} = \frac{7n}{5m}$$

Complicate:

$$\#58. \frac{3}{4} = \frac{3 \cdot 6}{4 \cdot 6} = \frac{18}{24}$$

$$\#64. \frac{1}{3} = \frac{1 \cdot 20}{3 \cdot 20} = \frac{20}{60}$$

$$\#66. \frac{3}{10} = \frac{3 \cdot 5a}{10 \cdot 5a} = \frac{15a}{50a}$$

$$\#70. \frac{9}{4x} = \frac{9 \cdot 11}{4x \cdot 11} = \frac{99}{44x}$$

$$\#72. \frac{5}{12} = \frac{5 \cdot 3n}{12 \cdot 3n} = \frac{15n}{36n}$$