

20.1 Fraction Division - Worksheet 1

1 Calculate $\frac{4}{15} \div \frac{8}{3}$ by rewriting the calculation as multiplication by the reciprocal.

2 Calculate $\frac{4}{15} \div \frac{8}{3}$ by rewriting the calculation as multiplication by the reciprocal.

3 Calculate $\frac{4}{15} \div \frac{8}{3}$ by multiplying the numerator and denominator by the same value to simplify the fraction.

4 All three of these problems were the same underlying calculation, but presented and worked out in three separate ways. Which way makes the most intuitive sense to you?

Even though one way may be more intuitive for you, it is helpful to understand and practice all three of these methods.

20.2 Fraction Division - Worksheet 2

1

Calculate $\frac{30}{11} \div \frac{18}{55}$.

2

Calculate $\frac{21}{10} \div \frac{45}{16}$.

3

Calculate $\frac{9a^2b}{14} \div \frac{12b}{35a}$.

4

Calculate $\frac{15y}{8x^2} \div \frac{9y^2}{20x}$.

20.3 Fraction Division - Worksheet 3

1

Calculate $\frac{12}{11} \div \frac{21}{44}$.

2

Calculate $\frac{18}{25} \div \frac{14}{15}$.

3

Calculate $\frac{27p^2}{20q} \div \frac{45p}{28q^3}$.

4

Calculate $\frac{16x^3}{25y^2} \div \frac{6y}{5x}$.

20.4 Fraction Division - Worksheet 4

1 We are going to work with one interpretation of fraction division that uses common denominators. The fraction $\frac{a}{b}$ can be interpreted as having a wedges of size $\frac{1}{b}$. This means that the division calculation $\frac{16}{3} \div \frac{4}{3}$ can be understood as having 16 wedges of size $\frac{1}{3}$ and creating groups of 4 wedges of size $\frac{1}{3}$. With this framework in mind, draw a diagram of 16 wedges of size $\frac{1}{3}$ and divide it into groups of 4 wedges each. Use this to determine the result of the calculation.

2 Using algebraic methods, verify that $\frac{a}{c} \div \frac{b}{c} = \frac{a}{b}$.

3 Calculate $\frac{12}{5} \div \frac{4}{3}$ using a common denominator.

20.5 Fraction Division - Worksheet 5

1

Calculate $\frac{5}{4} \div \frac{2}{3}$ using a common denominator.

2

Calculate $\frac{25}{6} \div \frac{5}{4}$ using a common denominator.

3

Calculate $\frac{7}{16} \div \frac{5}{24}$ using a common denominator.

4

Calculate $\frac{12x}{5y^2} \div \frac{6xy}{35}$ using a common denominator.