Converting Any Fraction

Convert the fraction into a decimal by dividing.

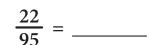
2 Convert the fraction into a decimal by dividing.

Convert the fraction into a decimal by dividing.

$$\frac{5}{12} =$$

Convert the fraction into a decimal by dividing.

Convert the fraction into a decimal using a **calculator**. Round off to three decimal places.





Converting Any Fraction

Convert the fraction into a decimal by dividing.

$$\frac{4}{5} = 0.8$$

Convert the fraction into a decimal by dividing.

$$\frac{1}{6} = 0.1\overline{6}$$

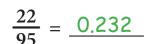
Convert the fraction into a decimal by dividing.

$$\frac{5}{12} = 0.416$$

Convert the fraction into a decimal by dividing.

$$\frac{8}{11} = 0.\overline{72}$$

Convert the fraction into a decimal using a **calculator**. Round off to three decimal places.





Converting Any Fraction to a Decimal (by Dividing)

F-CAF 1

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have non-repeating digits. Be sure to show your work!

$$\frac{2}{5} = 0.4$$



Name:

Date:

Repeating Decimals from Fractions

F-CAF 2

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have repeating digits. Be sure to show your work!

Example
$$\frac{1}{6} = 0.16$$

$$\begin{array}{r} 0.166 \\ \hline 40 \\ \hline -36 \\ \hline \end{array}$$
same pattern in division means a repeating decimal

$$\frac{1}{9} =$$



Name:

Date:

Long Repeating Decimals from Fractions

F-CAF 3

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have long decimal parts, so round off to three decimal places. Be sure to show your work!

$$\frac{1}{7} = 0.143$$

$$\frac{3}{7} =$$

$$\frac{5}{13} =$$

Converting with a Calculator

F-CAF 4

Instructions: The following fractions have been converted to decimals with a calculator. Round the answers off to three decimal places or use the repeat symbol to shorten the answer if you see a repeating pattern.

$$\frac{2}{7} = 0.2857142... = 0.286$$

$$\frac{7}{9} = 0.7777777... = 0.7$$

$$\frac{15}{21} = 0.7142857... =$$

$$\frac{19}{33} = 0.5757575... =$$

$$\frac{9}{14} = 0.6428571... = _____$$

$$\frac{9}{23} = 0.3913043... =$$

$$\frac{8}{11} = 0.7272727... =$$

$$\frac{6}{19} = 0.3157894... = _____$$

$$\frac{7}{22} = 0.3181818... = ____$$

$$\frac{11}{12} = 0.9166666... = _____$$

Instructions: Use a calculator to convert these fractions to decimals. Round off to three decimal places or use the repeat symbol if you see a repeating pattern.

$$\frac{4}{7} = 0.571$$

$$\frac{12}{17} =$$

$$\frac{12}{13} =$$

$$\frac{15}{22} =$$

$$\frac{10}{11} =$$

$$\frac{3}{13} =$$

$$\frac{16}{31} =$$

$$\frac{4}{3} =$$

Converting Any Fraction to a Decimal (by Dividing)

F-CAF 1

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have non-repeating digits. Be sure to show your work!

$$\frac{2}{5} = 0.4$$

$$\frac{1}{4} = 0.25$$

$$\frac{3}{4} = 0.75$$

$$\frac{3}{8} = 0.375$$

$$\frac{1}{8} = 0.125$$

$$\frac{5}{8} = 0.625$$

Repeating Decimals from Fractions

F-CAF 2

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have repeating digits. Be sure to show your work!

$$\frac{1}{6} = 0.1\overline{6}$$

$$\frac{0.166}{40}$$

$$- \frac{6}{40}$$

$$- \frac{36}{40}$$

$$- \frac{36}{$$

$$\frac{1}{9} = 0.\overline{1}$$

$$\frac{5}{9} = 0.\overline{5}$$

$$\frac{5}{12} = \underbrace{0.416}_{0.4166}$$

$$12 \underbrace{)5.0000}_{-48}$$

$$\underbrace{-12}_{80}$$

$$\underbrace{-72}_{80}$$

$$\frac{3}{11} = \frac{0.27}{0.2727}$$

$$11)3.0000$$

$$-22$$

$$80$$

$$-77$$

$$80$$

$$-77$$

Long Repeating Decimals from Fractions

F-CAF 3

Instructions: Use 'decimal division' to convert these fractions into decimal values. These all have long decimal parts, so round off to three decimal places. Be sure to show your work!

$$\frac{1}{7} = 0.143$$

$$\frac{3}{7} = 0.429$$

$$\frac{6}{7} = 0.857$$

$$\frac{5}{13} = 0.385$$

$$\frac{2}{17} = 0.118$$

Converting with a Calculator

F-CAF 4

Instructions: The following fractions have been converted to decimals with a calculator. Round the answers off to **three** decimal places or use the repeat symbol to shorten the answer if you see a repeating pattern.

$$\frac{2}{7} = 0.2857142... = 0.286$$

$$\frac{7}{9} = 0.7777777... = 0.\overline{7}$$

$$\frac{15}{21} = 0.7142857... = 0.714$$

$$\frac{19}{33} = 0.5757575... = 0.57$$

$$\frac{9}{14} = 0.6428571... = 0.643$$

$$\frac{9}{23} = 0.3913043... = 0.391$$

$$\frac{8}{11} = 0.7272727... = 0.\overline{72}$$

$$\frac{6}{19} = 0.3157894... = 0.316$$

$$9 \quad \frac{7}{22} = 0.3181818... = 0.3\overline{18}$$

$$\frac{11}{12} = 0.9166666... = 0.91\overline{6}$$

Instructions: Use a calculator to convert these fractions to decimals. Round off to **three** decimal places or use the repeat symbol if you see a repeating pattern.

$$\frac{4}{7} = 0.571$$

$$\frac{12}{17} = 0.706$$

$$\frac{12}{13} = 0.923$$

$$\frac{15}{22} = 0.681$$

$$\frac{10}{11} = 0.90$$

$$\frac{3}{13} = 0.231$$

$$\frac{16}{31} = 0.516$$

$$\frac{4}{3} = 1.\overline{3}$$