

Fractions, Decimals & Percents

1. Which of the following fractions would convert to a repeating decimal?

$$\frac{1}{4} = \quad \frac{3}{5} = \quad \frac{7}{8} = \quad \frac{1}{11} =$$

Write your response here:
(show your work)

2. Convert to a fraction in simplest form:

$$15\%$$

Write your response here:
(show your work)

3. Convert to a decimal:

$$\frac{11}{80}$$

Write your response here:
(show your work)

4. Convert to a fraction in simplest form:

$$0.32$$

Write your response here:
(show your work)

5. Convert to a decimal:

$$\frac{13}{22}$$

Write your response here:
(show your work)

Answers

1. $\frac{1}{11}$
2. $\frac{3}{20}$
3. 0.138
4. $\frac{8}{25}$
5. 0.59

Explanations

1. Convert the given fractions to decimals:

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

$$\frac{3}{5} = 0.6$$

$$\frac{7}{8} = 0.875$$

$$\frac{1}{11} = 0.0909090909091$$

$\frac{1}{11}$ is equal to **0.0909090909091**, which is a repeating decimal.

2. To convert a percentage to a fraction, place the percentage (without the % sign) over 100 and simplify.

$$15\% = \frac{15}{100} = \frac{3}{20}$$

3. To convert from a fraction to a decimal, divide the numerator by the denominator.

$$\frac{11}{80} = 11 \div 80$$

$$\approx \mathbf{0.138}$$

4. Multiply the decimal by 100 (to get a whole number) and place this in the numerator. Then place 100 in the denominator. Simplify if possible.

$$0.32 = \frac{32}{100} = \frac{8}{25}$$

5. To convert from a fraction to a decimal, divide the numerator by the denominator.

$$\frac{13}{22} = 13 \div 22$$

$$\approx \mathbf{0.59}$$