

Answer on Question #80290 – Math – Algebra

Question

convert the following decimal into simplified fraction

0.0357

0.125

Solution

By the definition, these decimal fractions can be written as

$$0.0357 = \frac{357}{10000}, \quad (1)$$

$$0.125 = \frac{125}{1000}. \quad (2)$$

As long as the numerator and the denominator in (1) do not have common divisors, the corresponding fraction cannot be simplified. However, fraction (2) still can be reduced to $\frac{1}{8}$ because of the common divisor $5 \cdot 5 \cdot 5$. Finally, the following answer can be obtained:

$$0.0357 = \frac{357}{10000},$$

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

Answer: $0.0357 = \frac{357}{10000}, 0.125 = \frac{1}{8}.$