

TRUE or FALSE:

1. ALL integers are rational numbers. ✓
 $0, -2, -74$
2. ALL natural numbers are whole numbers. T
 $1, 2, 3, 4$
3. ALL rational numbers are natural numbers. F
 $\frac{3}{4}$
4. ALL integers are irrational numbers. F

Sep 7-2:01 PM

Suppose you are ice fishing on Blanchford Lake, NWT. The temperature at midnight is -12°C . At 6 am the next day, the temperature is -11°C . What must the temperature have been at some time during the night?

Oct 26-9:30 PM

Oct 26-9:48 PM

So you're saying a rational number can be written as a $\frac{a}{b}$.

A rational number is any number that can be written in the form $\frac{a}{b}$ where a and b belong to integers and $b \neq 0$.

$$Q = \left\{ \frac{a}{b} \mid a, b \in I, b \neq 0 \right\}$$

Oct 26-10:08 PM

$$Q = \left\{ \frac{a}{b} \mid a, b \in I, b \neq 0 \right\}$$

Sep 1-9:28 PM

Are these numbers rational?

Oct 27-8:53 PM

$$\begin{aligned} \frac{1}{5} &= -0.2 & \frac{1}{5} &= 0.2 \\ \frac{1}{5} &= -0.2 \\ \frac{1}{5} &= -0.2 \end{aligned}$$

$$\frac{1}{5} \times 2 = \frac{2}{10} \times 100 = \frac{200}{1000} \div 10 = \frac{20}{100}$$

Common fractions as decimals

$$\begin{aligned} \frac{1}{5} &= 0.2 & \frac{1}{9} &= 0.\bar{1} \\ \frac{1}{4} &= 0.25 & \frac{2}{9} &= 0.\bar{2} \\ \frac{1}{3} &= 0.\bar{3} & \frac{3}{9} &= 0.\bar{3} \\ \frac{1}{2} &= 0.5 & \frac{1}{10} &= 0.1 \\ & & \frac{5}{2} & \\ \frac{3}{5} &= 0.6 & & \\ \frac{2}{3} &= 0.\bar{6} & \frac{3}{4} &= 0.75 \end{aligned}$$

Equivalent fractions

$$\frac{3}{4} \times 2 = \frac{6}{8} \times 10 = \frac{60}{80} = \frac{75}{100}$$

$$\frac{70}{100} \div 10 = \frac{7}{10} = \frac{14}{20}$$

$$\frac{80}{100} \div 10 = \frac{8}{10} \div 2 = \frac{4}{5}$$