

Repeating Decimals to Fractions Homework

1) Which number is equivalent to the repeating decimal $0.242242242\dots$?

A. $\frac{24}{100}$

B. $\frac{242}{999}$

C. $\frac{242}{1000}$

D. $\frac{2422}{9999}$

2) Which of these is a rational number?

A. $\sqrt{254}$

B. $\frac{\sqrt{125}}{5}$

C. $-\frac{\sqrt{4}}{2}$

D. $-\sqrt{3}$

3) Which fraction is equivalent to $0.\overline{07}$?

A. $\frac{7}{100}$

B. $\frac{7}{99}$

C. $\frac{7}{90}$

4) Which fraction is equivalent to $0.\overline{15}$?

A. $\frac{5}{33}$

B. $\frac{3}{20}$

C. $\frac{1}{6}$

5) Which number below is irrational?

A. $\sqrt[3]{8}$

B. $\sqrt[3]{125}$

C. $\sqrt{49}$

D. $\sqrt{52}$

6) In which set(s) of numbers does the real number 0 belong?

A. irrational only

B. rational, whole, and natural

C. rational, integer, and natural

D. rational, integer, and whole

7) Which fraction is equal to $0.\overline{5}$?

A. $\frac{11}{20}$

B. $\frac{9}{20}$

C. $\frac{5}{11}$

D. $\frac{5}{9}$

8) Which fraction is equivalent to $3.\overline{33}$?

A. $\frac{10}{3}$

B. $\frac{36}{11}$

C. $\frac{333}{100}$

D. $\frac{91}{30}$

9) Convert $0.\overline{67}$ to a fraction reduced to lowest terms. Show your work.