Repeating Decimals to Fractions Homework

1) Which number is equivalent to the repeating decimal 0.242242242...?

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.

Practice: Solve.

1) $.\overline{4} \times \frac{2}{3} =$

2) $\left|\frac{3}{5} \div 2.\overline{2}\right| =$

3) $1.\overline{3} + 2\frac{1}{18} =$

PRACTICE - ADDITIONAL Problems

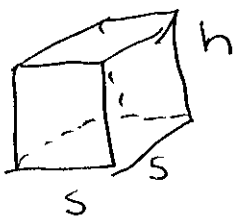
1.) What equation do you get when you solve the equation

$$\frac{a}{x} - \frac{b}{x} = c \text{ for } x$$

2) $\frac{x+2}{y-1} = 2$ solve for x

3) $m = \frac{x+n}{p}$ solve for x

4) A rectangular prism with height h with square base with side s is shown



a. Write a formula for the surface area A of the prism

b. Rewrite the formula to find h in terms of A and s. If s is 10 cm and A is 760 cm^2 what is the height of the prism.