

Name \_\_\_\_\_

Date \_\_\_\_\_

Mr. Tallman

Math 7

**Homework # 12 - Converting Between Fractions and Decimals**

Convert the following fractions into decimals using long division. Show all work.

$$1) \frac{4}{25} \quad \begin{array}{r} .16 \\ 25 \overline{) 4.00} \\ \underline{25} \phantom{0} \\ 150 \\ \underline{150} \\ 0 \end{array}$$

Answer: .16

$$2) \frac{7}{9} \quad \begin{array}{r} .7\bar{7} \\ 9 \overline{) 7.000} \\ \underline{63} \phantom{0} \\ 70 \\ \underline{63} \\ 70 \end{array}$$

Answer: .7\bar{7}

$$3) 5\frac{3}{8} \quad \begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{24} \phantom{00} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Answer: 5.375

$$4) \frac{6}{8} \quad \begin{array}{r} .75 \\ 8 \overline{) 6.00} \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Answer: .75

$$5) \frac{37}{50} \quad \begin{array}{r} .74 \\ 50 \overline{) 37.00} \\ \underline{350} \\ 200 \\ \underline{200} \\ 0 \end{array}$$

Answer: .74

$$6) \frac{34}{99} \quad \begin{array}{r} .34 \\ 99 \overline{) 34.000} \\ \underline{297} \phantom{0} \\ 430 \\ \underline{396} \\ 340 \end{array}$$

Answer: .34

Convert the following decimals into fractions or mixed numbers in lowest terms.

7) 0.6  
 $\frac{6}{10} \div 2$   $\left(\frac{3}{5}\right)$

8) 0.66  
 $\frac{66}{100} \div 2$   $\left(\frac{33}{50}\right)$

9) -1.375  
 $-\frac{1375}{1000} \div 125$   $\left(-\frac{11}{8}\right)$

10) 0.27  
 $\left(\frac{27}{100}\right)$

11) -0.04  
 $-\frac{4}{100} \div 4$   $\left(-\frac{1}{25}\right)$

12) 3.127  
 $3\frac{127}{1000}$

13) Which of the following fraction converts to a **repeating decimal**?

A)  $\frac{4}{25}$

B)  $\frac{1}{2}$

C)  $\left(\frac{33}{99}\right)$

D)  $\frac{1}{10}$