Name: Date:

Divide Decimals by Decimals 3

1. Write a division sentence.

a. How many times does 1.5 fit into 6?

b. How many times does 0.3 fit into 0.9?

c. How many times does 0.04 fit into 0.12?

c. How many times does 0.09 fit into 0.81?

2. Equivalent rational expressions... continue them according to the pattern!

a. $\frac{800}{200} = \frac{\square}{20} = \frac{\square}{2} = \frac{0.8}{0.2} = \frac{\square}{0.02} =$

b. $\frac{\square}{\square} = \frac{\square}{\square} = \frac{1.14}{0.02} = \frac{\square}{0.2} = \frac{\square}{2} = \frac{\square}{20} = \frac{\square}{200} =$

3. Divide *mentally* and compare the problems. Start from problems you know!

a.	**b.**	**c.**	**d.**
0.9 ÷ 0.3	100 ÷ 0.5	0.18 ÷ 0.02	0.18 ÷ 10
9 ÷ 0.3	10 ÷ 0.5	1.8 ÷ 0.2	1.08 ÷ 100
90 ÷ 0.3	1 ÷ 0.5	1.8 ÷ 0.02	0.29 ÷ 1000
900 ÷ 0.3	0.1 ÷ 0.5	0.18 ÷ 0.002	25 ÷ 1000

4. Divide using long division. Use a bar to indicate a repeating decimal.

a. $\frac{9.85}{0.05}$

b. $\frac{0.365}{0.8}$

c. $\frac{635.7}{0.11}$

d. $\frac{32}{0.6}$

5. Solve the equations.

a. $5x = 0.98$ **b.** $2.4m = 0.238$ **c.** $10{,}000y = 358$