

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Divide. Rewrite each expression as a division sentence with a fraction divisor, and fill in the blanks. The first one is done for you.

Example:  $4 \div 0.1 = 4 \div \frac{1}{10} = 40$

There are 10 tenths in 1 whole.

There are 40 tenths in 4 wholes.

a.  $9 \div 0.1 = 90$

There are 10 tenths in 1 whole.

There are 90 tenths in 9 wholes.

b.  $6 \div 0.1 = 60$

There are 10 tenths in 1 whole.

There are 60 tenths in 6 wholes.

c.  $3.6 \div 0.1 = 36$

There are 30 tenths in 3 wholes.

There are 6 tenths in 6 tenths.

There are 36 tenths in 3.6.

d.  $12.8 \div 0.1 = 128$

There are 120 tenths in 12 wholes.

There are 8 tenths in 8 tenths.

There are 128 tenths in 12.8.

e.  $3 \div 0.01 = 300$

There are 100 hundredths in 1 whole.

There are 300 ~~tenths~~ <sup>hundredths</sup> in 3 wholes.

f.  $7 \div 0.01 = 700$

There are 100 hundredths in 1 whole.

There are 700 hundredths in 7 wholes.

g.  $4.7 \div 0.01 = 470$

There are 400 hundredths in 4 wholes.

There are 70 hundredths in 7 tenths.

There are 470 hundredths in 4.7.

h.  $11.3 \div 0.01 = 1130$

There are 1100 hundredths in 11 wholes.

There are 30 hundredths in 3 tenths.

There are 1130 hundredths in 11.3.

2. Divide.

a. $2 \div 0.1$ $2 \div \frac{1}{10} = 2 \times 10$ $= 20$	b. $23 \div 0.1$ $23 \div \frac{1}{10} = 23 \times 10$ $= 230$	c. $5 \div 0.01$ $5 \div \frac{1}{100} = 5 \times 100$ $= 500$
d. $7.2 \div 0.1$ $7.2 \div \frac{1}{10} = 7.2 \times 10$ $= 72$	e. $51 \div 0.01$ $51 \div \frac{1}{100} = 51 \times 100$ $= 5,100$	f. $31 \div 0.1$ $31 \div \frac{1}{10} = 31 \times 10$ $= 310$
g. $231 \div 0.1$ $231 \div \frac{1}{10} = 231 \times 10$ $= 2,310$	h. $4.37 \div 0.01$ $4.37 \div \frac{1}{100} = 437 \times 100$ $= 437$	i. $24.5 \div 0.01$ $24.5 \div \frac{1}{100}$ $= 24.5 \times 100$ $= 2,450$

3. Giovanna is charged \$0.01 for each text message she sends. Last month her cell phone bill included a \$12.60 charge for text messages. How many text messages did Giovanna send?

$$12.60 \div 0.01 = 12.60 \div \frac{1}{100} = 12.60 \times 100 = 1,260$$

Giovanna sent 1,260 text messages.

4. Geraldine solved a problem:  $68.5 \div 0.01 = 6,850$ .

Ralph said, "This is wrong because a quotient can't be greater than the whole you start with. For example,  $8 \div 2 = 4$ , and  $250 \div 5 = 50$ ." Who is correct? Explain your thinking.

Geraldine is correct. Since she is dividing by a number smaller than 1, but larger than zero, the quotient will get bigger.

5. The price for an ounce of gold on September 23, 2013, was \$1,326.40. A group of 10 friends decide to share the cost equally on 1 ounce of gold. How much money will each friend pay?

$$1326.40 \div 10 = 132.64$$

Each friend will pay \$132.64.