

Name: key  
5<sup>th</sup> Grade Notes 6.13 Divide with a Decimal in Divisor p. 455

1. When a divisor has a decimal point, you need to move it all the way to the right so it becomes a whole number.

Ex:  $4.5 \rightarrow 45. \rightarrow 45$

Ex:  $6.54 \rightarrow 654$

Ex:  $45.1379 \rightarrow 451,379$

2. Then move the decimal point in the dividend the same number of places.

Ex:  $6.75 \div 4.5$

move divisor first:  $45 \overline{) 6.75}$   
one place      one place (same # of places)

3. divide normally

4. line up the decimal point in the quotient with the new decimal point in the dividend

5. write the answer and circle it

6. always check with the original divisor (not what you changed) and make sure it equals the original dividend

Ex:  $6.75 \div 4.5$

$$\begin{array}{r} 0.1.5 = \textcircled{1.5} \\ 4.5 \overline{) 6.75} \\ \underline{-45} \phantom{0} \\ 225 \\ \underline{-225} \\ 0 \end{array}$$

dec. pt. is lined up w/new dec. pt.

Check:

$$\begin{array}{r} 4.5 \leftarrow \text{orig. divisor} \\ \times 1.5 \leftarrow \text{quotient} \\ \hline 225 \\ +450 \\ \hline 6.75 \checkmark \text{ orig. dividend} \end{array}$$

Ex:  $.06 \div 1.5$

$$\begin{array}{r} 0.04 = \textcircled{.04} \\ 1.5 \overline{) .060} \\ \underline{-60} \\ 0 \end{array}$$

add a zero at the end

check:

$$\begin{array}{r} .04 \\ \times 1.5 \\ \hline 20 \\ +040 \\ \hline .060 \checkmark \end{array}$$