| Steps to | EXAMPLE | YOU DO: | YOU DO: |
|--|--|----------------------|---------------------------------|
| dividing fractions | $1\frac{1}{3} \div \frac{1}{2}$ | $2 \div \frac{2}{3}$ | $1\frac{5}{6} \div \frac{7}{9}$ |
| Step 1: Convert mixed numbers into improper fractions | $1\frac{1}{3} = \frac{4}{3}$ | | |
| Step 2: Find a common denominator and convert each fraction to its equivalent value | $\frac{4}{3} = \frac{8}{6}$ $\frac{1}{2} = \frac{3}{6}$ | | |
| Step 3: Since the denominators are now the same, we can just divide the numerators | $\frac{8}{6} \div \frac{3}{6} = \frac{8}{3}$ | | |
| Step 4: Simplify the fractions | $\frac{8}{3} = 2\frac{2}{3}$ | | |
| Steps to adding | EXAMPLE | YOU DO: | YOU DO: |
| decimals | 125.94 + 16.3 | 11 + 1.2 | 12.8 + 0.55 |
| Stack the numbers with the decimals lining up | 125.94 <u>+ 16.3</u> | | |
| Add zeros as placeholders if there are not enough numbers before or after the decimals | 125.94 <u>+ 16.30</u> | | |
| Right to left, add each column and bring down the decimal directly below the others | 125.94 <u>+ 16.30</u> 142.24 | | |

| Steps to | EXAMPLE | YOU DO: | YOU DO: |
|--|----------------------------------|------------|--------------|
| subtracting decimals | 297.5 – 121 | 29.3 – 1.2 | 51.55 – 11.5 |
| Stack the numbers with the decimals lining up | 297.5 <u>- 121</u> | | |
| Add placeholder zeros | 297.5 <u>- 121.0</u> | | |
| Right to left, subtract each column, borrowing if needed and bring down the decimal directly below the others | 297.5 <u>- 121.0</u> 176.5 | | |

| Steps to | EXAMPLE | YOU DO: | YOU DO: |
|---|---|------------|----------|
| multiplying decimals | 5 x 0.14 | 0.1 x 0.16 | 60 x 1.1 |
| Write the problem vertically | 0.14 <u>x 5</u> | | |
| Ignore the decimal points and multiply | $\begin{array}{r} 0.14\\ \underline{x 5}\\ 070 \end{array}$ | | |
| Place the decimal point in the answer by counting how many places the decimal point has moved. | $\begin{array}{r} 0.14\\ \underline{x 5}\\ 0.70 \end{array}$ | | |

| Steps to dividing | EXAMPLE | YOU DO: | YOU DO: |
|--|--|---------|-----------|
| decimals by whole numbers | $10.2 \div 5$ | 78.96÷2 | 70.95 ÷ 5 |
| Set up the problem normally and divide | $ \begin{array}{r} 2 \ 04 \\ 5 10.20 \\ \underline{-10} \\ 020 \\ \underline{-20} \\ 0 \end{array} $ | | |
| Put the decimal point in the quotient (the answer) directly above the decimal point in the dividend (the number being divided) | $\frac{2.04}{510.20}$ | | |

| Steps to | EXAMPLE | YOU DO: | YOU DO: |
|--|-----------------|----------------|---------------|
| dividing decimals by | $0.25 \div 0.5$ | $7.2 \div 0.2$ | 0.3633 ÷ 0.06 |
| decimals <i>sy</i> | | | |
| If the problem is written across, copy it so that the FIRST number is inside the division sign. | 0.5 0.25 | | |
| Move the decimal point of the number on the outside of the division sign all the way to the right so that it becomes a whole number. | 0.5 0.25 | | |
| Move the decimal point on the inside number the SAME number of places to the right as you did on the outside | | | |

| number. Add 0s if you need to move beyond the end of the number. | | |
|---|---|--|
| Put the decimal point for your answer DIRECTLY ABOVE the one in your inside number. | 0.5 0.25 | |
| Divide the same way you do with whole numbers. After the decimal point, answer with a 0 any time a number is too small to be divided. | $ \begin{array}{r} 0.5 \\ 05 \overline{)02.5} \\ \underline{-25} \\ 0 \end{array} $ | |