

# Decimal Strategy Sheet

## Adding Decimals and Subtracting with decimals

The trick to remember when adding numbers with decimals is to line up the decimals.

Example:

**Step 1** Line up the decimals

$$\begin{array}{r} 35.67 \\ + 45.48 \\ \hline \end{array}$$

**Step 2** Add one place value at a time

$$\begin{array}{r} 1\ 1\ 1 \\ 35.67 \\ + 45.48 \\ \hline 81.15 \end{array}$$

**Step 3** Record sum

81.15

Note: follow the same three steps when subtracting

## Multiplying Decimals

When multiplying decimals, the decimals do not have to be lined up to get the correct product.

Partial Product (there will be questions similar to this strategy)

**Step 1** Multiply each place value

**Step 2** Add each product

$$\begin{array}{r} 5.7 \\ \times 3.6 \\ \hline \end{array}$$

$$30 \times 50 = 1500$$

$$30 \times 7 = 210$$

$$6 \times 50 = 300$$

$$6 \times 7 = 42$$

$$\begin{array}{r} 1 \\ 1500 \\ 210 \\ 300 \\ + 42 \\ \hline 2052 \end{array}$$

**Step 3** Move the decimal over one space to the left.

205.2



## Dividing Decimals (Decimals in the dividend)

**Step 1** Move the decimal up

$$23 \overline{) 48.3}$$

**Step 2** Can 23 go into 48? Yes! Subtract

$$\begin{array}{r} 2 \\ 23 \overline{) 48.3} \\ - 46.0 \\ \hline 2.3 \end{array}$$

**Step 3**

How many times can 23 go into 23?

Subtract.

$$\begin{array}{r} 2.1 \\ 23 \overline{) 48.3} \\ - 46.0 \\ \hline 2.3 \\ - 2.3 \\ \hline 0 \end{array}$$

## Dividing Decimals (Decimals in the divisor)

**Step 1** Move the decimal to the right until the number becomes a whole number.

$$2.5 \cdot \overline{) 5.25}$$

**Step 2** When you move the decimal in the divisor, you have to do the same to the dividend.

$$25 \overline{) 52.5}$$

**Step 3** Move the decimal up.

$$25 \overline{) 52.5}$$

**Step 4** Can 25 go into 52.5? Yes!  
Divide and Subtract

$$\begin{array}{r} 2. \\ 25 \overline{) 52.5} \\ - 50 \\ \hline 2 \end{array}$$

**Step 5** Bring the 5 down

$$\begin{array}{r} 2. \\ 25 \overline{) 52.5} \\ - 50 \\ \hline 25 \end{array}$$

**Step 6** Divide and subtract

$$\begin{array}{r} 2.1 \\ 25 \overline{) 52.5} \\ - 50 \\ \hline 25 \\ - 25 \\ \hline 0 \end{array}$$

