

# Use written addition to add decimals; use rounding to estimate totals.

Round each number to the nearest whole, then add to *estimate* the total.



$$2.68 + 6.25$$

$$3 + 6 = 9$$

Now let's find the *exact* total using the two methods for column addition, the 'expanded' method and the 'compact' method.

Remember to leave a blank row above the answer line.

Add the 0.01s, then the 0.1s, then the 1s.

$$\begin{array}{r} 2 \quad 0.6 \quad 0.08 \\ + \quad 6 \quad 0.2 \quad 0.05 \\ \quad \quad 0.1 \\ \hline 8 \quad 0.9 \quad 0.03 \\ \underline{\quad \quad} \\ \mathbf{8.93} \end{array}$$

$$\begin{array}{r} 2.68 \\ + 6.25 \\ \quad 1 \\ \hline \mathbf{8.93} \end{array}$$

Close to our estimate!

# Use written addition to add decimals; use rounding to estimate totals.

Round each number to the nearest whole and add to estimate the total.



$$\begin{array}{r} 22.3 + 6.83 \\ 22 + 7 = 29 \end{array}$$

Now let's find the exact total using compact column addition.

Are you happy with this layout?



$$\begin{array}{r} 22.3 \\ + 6.83 \\ \hline \end{array}$$

The columns need to be aligned correctly. We need to align tenths with tenths, etc. An easy way to do this is to align the decimal point in each number.

$$\begin{array}{r} 22.3 \\ + 6.83 \\ \hline 29.13 \end{array}$$

Use written addition to add decimals; use rounding to estimate totals.

Red ribbon: 2.23m

Green ribbon: 3.71m

Blue ribbon: 4.84m

Estimate the total length of the three ribbons by *rounding* each number to the nearest whole..

$$2 + 4 + 5 = 11$$

$$\begin{array}{r} 2.23 \text{ m} \\ 3.71 \text{ m} \\ + 4.84 \text{ m} \\ \hline 10.78 \text{ m} \end{array}$$

It's just like adding two numbers but we just have one more digit to add in each column...