

# To Divide A Decimal by a Decimal:

Shift the decimal of both numbers equally to the right.

Press the elevator button to send the decimal in the dividend up to the second floor.

The diagram illustrates the division  $412 \div 0.3$ . The divisor is 0.3 and the dividend is 412. A horizontal line separates the two numbers. Red curved arrows labeled "2 hops" show the decimal in the divisor moving two places to the right, from 0.3 to 3. Another red curved arrow labeled "2 hops" shows the decimal in the dividend moving two places to the right, from 412 to 41200. A blue arrow points upwards from the decimal point in the dividend to the top of the division bar, representing the "elevator button" action.

$$412 \div 0.3$$

# To Divide A Whole Number by a Decimal:

Shift the decimal of both numbers equally to the right.

Place needed zeros.

Press the elevator button to send the decimal in the dividend up to the second floor.

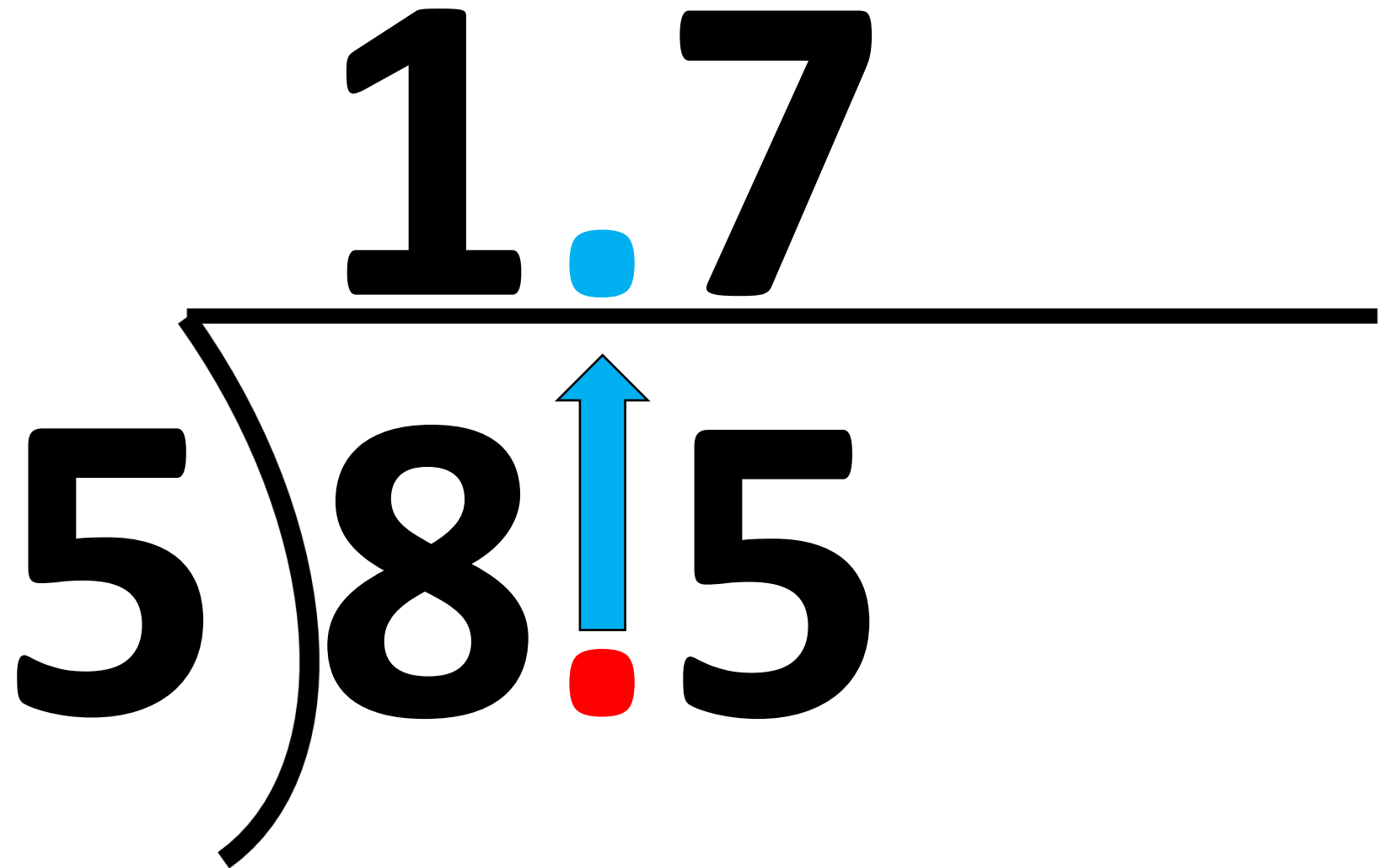
$$\begin{array}{r} 2.0 \\ \hline 1.5 \overline{) 3.0} \end{array}$$

1 hop

1 hop

# To Divide A Decimal by a Whole Number:

Press the elevator button to send the decimal in the dividend up to the second floor.

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \end{array}$$


When a Number  
Doesn't Divide Evenly:

Place a decimal on the  
end of the dividend.

Press the elevator  
button to send the  
decimal in the dividend  
up to the second floor.

Place as many zeros  
after the decimal as are  
needed to keep dividing.

A long division problem showing 71.75 divided by 4. The quotient is 17.9375. The dividend 71.75 has a blue decimal point and a blue arrow pointing up to the second floor (hundreds place) of the dividend 287.00. The dividend is written as 287.00 in purple. The divisor is 4. The quotient is 17.9375. The remainder is 0. The steps are: 4 goes into 28 seven times (28), remainder 0. 4 goes into 07 one time (4), remainder 3. 4 goes into 30 seven times (28), remainder 2. 4 goes into 20 five times (20), remainder 0. The final remainder is 0.

$$\begin{array}{r} 71.75 \\ 4 \overline{) 287.00} \\ \underline{-28} \phantom{00} \\ 07 \phantom{00} \\ \underline{-4} \phantom{00} \\ 30 \phantom{00} \\ \underline{-28} \phantom{00} \\ 20 \phantom{00} \\ \underline{-20} \phantom{00} \\ 0 \end{array}$$