

DIVIDING DECIMAL NUMBERS

Today we are going to have a look at dividing decimals. Let's review a few things:

Words you might see when asked to divide: quotient, divide evenly, goes into, share, split, out of, average.

Sometimes it makes it easier if you move the decimal point in both numbers to the right. For example:

$12.3 \div 2.4$ can be written as $123 \div 24$

I have moved the decimal point one place to the right in BOTH numbers. This is the same as multiplying both sides by 10.

In both sums, the two numbers have the same relationship to each other, so your answer to each sum will be the same.

Work these out by moving the decimal points the same amount of places to the right first:

a) $3.6 \div .6 = 6$

b) $6.0 \div 1.2 = 5$

c) $2.7 \div .9 = 3$

d) $1.44 \div .12 = 12$

Example question: Olivia has 4.8kg of flour. She wants to put the flour into 6 bags. How much will she put in each bag?

Solution:

$$\begin{array}{r} .8 \\ 6 \overline{)4.8} \end{array}$$

Therefore (\therefore) he will have .8kg in each bag. Now do these:

- 1) Tara, Hayden, Emma, Tom and Harper went out to lunch. The cost of the meal was \$428.50. If they shared the cost of the meal equally, how much did each person pay?
\$85.70
- 2) Alex paid \$58 for four tickets to see a show. What was the cost of each ticket?
\$232
- 3) Tessa bought 11.25kg of chook feed for her chickens. If she stores the same amount in three containers, how much will be in each container?
3.75kg
- 4) A biscuit factory used 34.8kg of chocolate chips to make four batches of biscuits. How many kg of chocolate chips were used in each batch of biscuits?
8.7kg
- 5) In Melbourne city Sage bought a multi-use ticket to ride trains, trams and buses for 20 days. If the ticket cost \$76.20, how much did he pay for each day's travel?
\$3.81