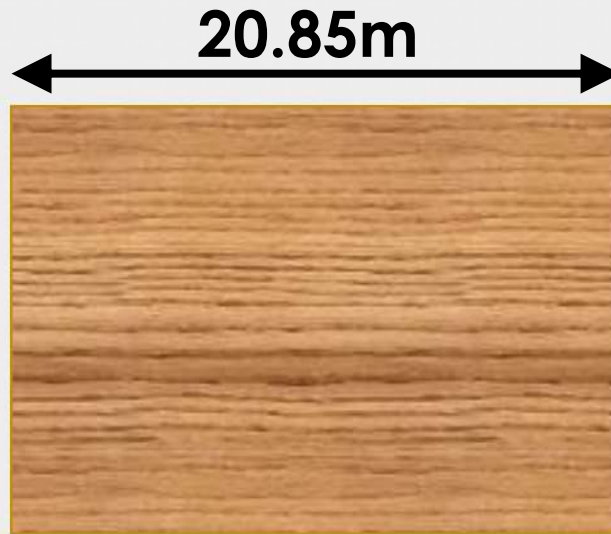


Year 6 Maths
Week 15 Lesson 3
Decimals – Division to Solve



Varied Fluency 1

Dad is making a log store.

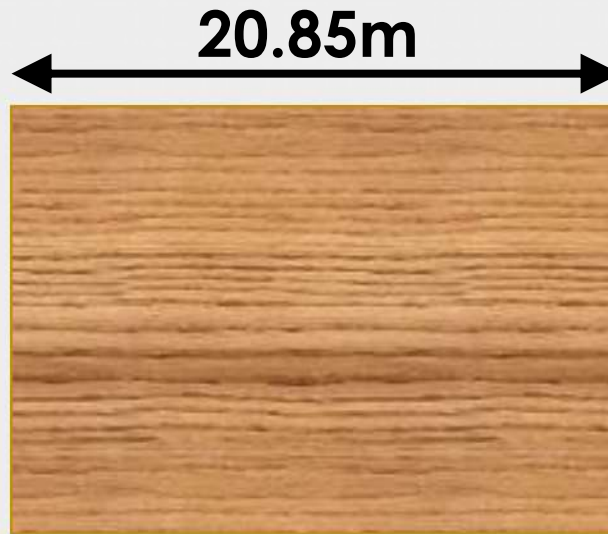


He needs 5 equal pieces from this plank.

How wide would each piece be?

Varied Fluency 1

Dad is making a log store.



He needs 5 equal pieces from this plank.

How wide would each piece be?

$$20.85\text{m} \div 5 = 4.17\text{m}$$

Varied Fluency 2

The school bee hives produce 57.2 litres of honey each year.

4 classes share the honey to sell on their stall at the fayre.



How much does each stall have?

Varied Fluency 2

The school bee hives produce 57.2 litres of honey each year.

4 classes share the honey to sell on their stall at the fayre.



How much does each stall have?

$$57.2 \text{ litres} \div 4 = 14.3 \text{ litres per class}$$

Varied Fluency 3

A farmer sells 47.5kg of carrots every week in harvest season.

He sells four times as many carrots to Asdi supermarket as to the markets.

47.5kg				
market	Asdi	Asdi	Asdi	Asdi

How much does he sell to markets?

Varied Fluency 3

A farmer sells 47.5kg of carrots every week in harvest season.

He sells four times as many carrots to Asdi supermarket as to the markets.

47.5kg				
market	Asdi	Asdi	Asdi	Asdi

How much does he sell to markets?

$$47.5 \div 5 = 9.5\text{kg to markets}$$

Varied Fluency 4

Create your own word problem for the calculation.

$$34.48 \div 8 = \square$$

Now solve it!

Varied Fluency 4

Create your own word problem for the calculation.

$$34.48 \div 8 = 4.31$$

Now solve it!

Various possible answers for a word problem with the same solution.

There is 34.48kg of flour to be shared equally between 8 bakeries.
How much does each bakery receive? Solution: Each bakery receives 4.31kg.

Main Tasks – part i

Level 1

1a. A gardener is planting the plot below.



He needs 5 rows of seeds.

How far apart should the rows be?



VF

2a. Ellie has 27.69kg of sweets to share equally between three jars.

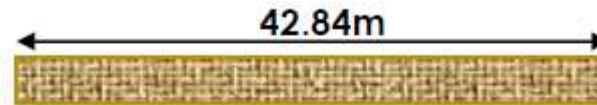
What will be the weight of the sweets in each jar?



VF

Level 2

5a. A zookeeper has this piece of thick rope for in the monkey enclosure.



He needs to make 6 large rope swings.

How much rope does he have for each swing?



VF

6a. George has 2.16 litres of juice to share equally between nine friends at his party.

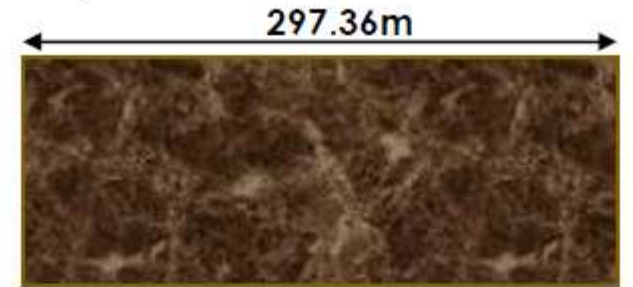
How much juice does each friend get?



VF

Level 3

9a. A builder is planning a row of houses on this piece of land.



He wants to fit 12 terraces of houses on the land. Each terrace will have three houses. How wide will each terrace and house be?



VF

10a. Jo and Kai run 82.32km each week. They run the same route every day of the week and each day it takes them 2 hours.

How far do they run each day?
How far do they run each hour?



VF

Main Tasks – part ii

Level 1

3a. Danny has collected double the weight of conkers compared to Libby.

They have 12.6kg of conkers altogether.



What weight of conkers did Libby collect?



VF

4a. Create your own word problem for the calculation below.

$$77.35 \div 7 = \square$$

Now solve it!

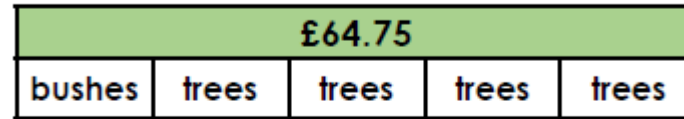


VF

Level 2

7a. Geoff spends £64.75 on trees and flowering bushes.

He spent 4 times as much on trees than on the bushes.



How much did he spend on bushes?



VF

8a. Create your own word problem for the calculation below.

$$34.4 \div 8 = \square$$

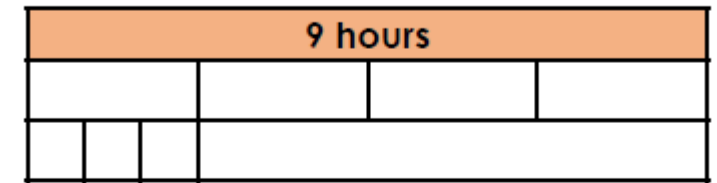
Now solve it!



VF

Level 3

11a. On a radio station over 9 hours there is 3 times as much music played than talking. The news takes one third of the talking time.



How much time is there for news?



VF

12a. Create your own word problem for the calculations below.

$$78.57 \div 9 \times 7 = \square$$

Now solve it!



VF

Developing

1a. 5.1cm or 51mm

2a. 9.23kg

3a. Libby 4.2kg

4a. Various answers, for example:

77.35m of rope is shared between 7 climbers. How much does each climber get? Solution: 11.05m

Expected

5a. 7.14m

6a. 0.24 litres

7a. £12.95 on bushes

8a. Various answers, for example:

A path 34.4m long is to have lavender planted along one side for one eighth of the length. How long will the lavender walk be? Solution: 4.3m

Greater Depth

9a. Each terrace is 24.78m wide. Each house is 8.26m wide.

10a. 11.76km each day and 5.88km each hour.

11a. 0.75 hours, 45 mins

12a. Various answers, for example:

78.57m of thread is used to create 9 cotton bobbins. How much is on each bobbin? How much cotton is on 7 bobbins? Solution: 8.73m on each bobbin so 61.11m is on 7 bobbins.

Here are the answers. How did you do?

There's going to be two more pages of questions. If you made some mistakes then great! Mistakes are brilliant as we remember them and learn from them.

The following questions are similar to the previous ones, so apply what you learnt from the previous ones.

You may also want to move up a level if you're feeling confident.

Main Tasks – part iii

Level 1

1b. The caretaker is painting markers for each class to line up along in the yard.



There are 4 classes.

How far apart should the lines be?



VF

2b. A dance teacher has 6.84 hours to run six classes of equal length.

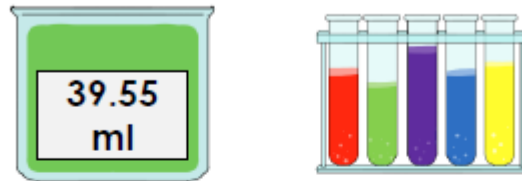
How long would each class last?



VF

Level 2

5b. A scientist needs to accurately measure out the solution.



She needs to put an equal amount of the solution into each of five test tubes.

How much solution must she put in each test tube.



VF

6b. A newsreader has 59.6 minutes to produce a bulletin with 4 stories of equal length.

How much time does she have for each story?

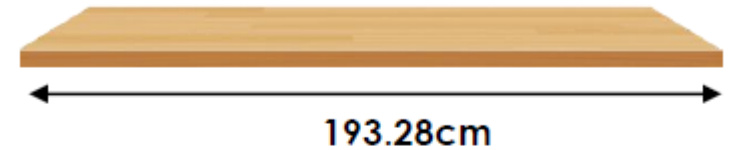


VF



Level 3

9b. A new bookshop is planning its layout and has the following shelf.



Each book is 8cm wide.

How many books can they fit on the shelf? How much longer would the shelf have to be to fit on another book?



VF

10b. The council parks team has 168.3kg of sand to share between 11 parks and each park has 2 sandpits. How much sand can each park and sandpit have?



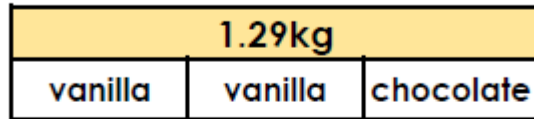
VF

Main Tasks – part iv

Level 1

3b. Eleanor has mixed 2 times as much vanilla dough as chocolate dough.

She has 1.29kg of dough altogether.



How much chocolate dough does she have?



VF

4b. Create your own word problem for the calculation below.

$$9.68 \div 8 = \square$$

Now solve it!

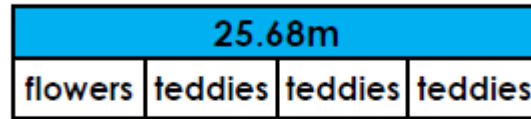


VF

Level 2

7b. Granny used 25.68m of wool knitting teddies and flowers.

Knitting teddies takes 3 times as much wool as flowers.



How much wool did she use for flowers?



VF

8b. Create your own word problem for the calculation below.

$$18.97 \div 7 = \square$$

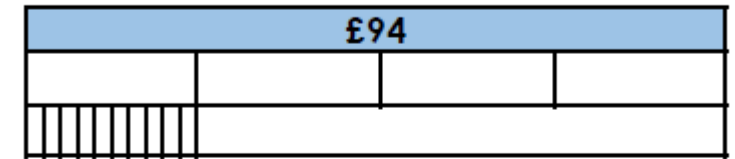
Now solve it!



VF

Level 3

11b. A pharmacy orders first aid kit stock. They spend £94 on bandages, plasters and gloves. Bandages cost triple the amount of plasters, while gloves are a tenth of the price of plasters.



How much do gloves cost?



VF

12b. Create your own word problem for the calculations below.

$$814.68 \div 12 \times 8 = \square$$

Now solve it!



VF

Developing

1b. 4.2m or 420cm.

2b. 1.14 hours

3b. 0.43kg

4b. Various answers, for example:

9.68kg of soil is shared between 8 flower beds. How much does each bed get?

Solution: 1.21kg

Expected

5b. 7.91ml

6b. 14.9 minutes

7b. 6.42m on flowers

8b. Various answers, for example:

It costs £18.97 to hire a bus which 7 people share. How much does each person owe? Solution: £2.71

Greater Depth

9b. 24.16 books so 24 books will fit on the shelf. It would have to be 7.84cm longer to fit on another book.

10b. 15.3kg of sand per park and 7.65kg per sandpit

11b. £2.35

12b. Various answers, for example:

Emma has saved £814.68 over a whole year. How much did she save each month? How much did she have saved after 8 months? Solution: £67.89 saved each month. After 8 months she had saved £543.12.

Well done!

If there's anything you are still unsure of from today's lesson please contact your teacher.