1.6.2020

LO: To practise mental Arithmetic

Summer 4 Arithmetic test.

If you are on the list to be returning to school on Tuesday 2nd June, you should complete this task and email to your Maths teacher today.
Those of you that will continue to work from home should complete the work for the week and submit on Friday 5th June .

Summer Test 4

Name: ..... Class: ..... Date: .....

1	$27 \times 0 =$ ☐	2	☐ $- 0.7 = 0.3$
3	$12^2 =$ ☐	4	☐ $\div 10 = 6200$
5	$48 \div$ ☐ $= 4$	6	$\frac{1}{2} - \frac{3}{10} =$ ☐
7	$17 + 7 = 4 \times$ ☐	8	$(14 - 4) \div (7 - 2) =$ ☐
9	$34.2983 \times 100 =$ ☐	10	$\frac{1}{3} \times \frac{1}{6} =$ ☐
11	☐ $= \frac{5}{2} - \frac{7}{12}$	12	$\frac{9}{10}$ of $80 =$ ☐
13	$1\frac{1}{4} + 2\frac{1}{4} =$ ☐	14	$93.4 \div 26 - 4.85 =$ ☐
15	☐ $= 732\,183 - 4468$	16	$6 + 3^2 \div (7 + 2) =$ ☐

Summer Test 4 (continued)

17	$3\frac{3}{4} - 1\frac{1}{4} =$ ☐	18	$4\overline{)837}$ ☐
19	$\frac{1}{3} + \frac{1}{5} =$ ☐	20	$0.02 \times 4 =$ ☐
21	40% of $250 =$ ☐	22	☐ $= 4000 - 2472$
23	$0.1 \times 6 =$ ☐	24	$1496 = 8 \times$ ☐
25	$9876 \div$ ☐ $= 6$	26	$34\overline{)9656}$ (2 marks) ☐
27	$\begin{array}{r} 9346 \\ \times \quad 47 \\ \hline \end{array}$ (2 marks) ☐	28	$0.07 \times 2 =$ ☐

Total marks	/30

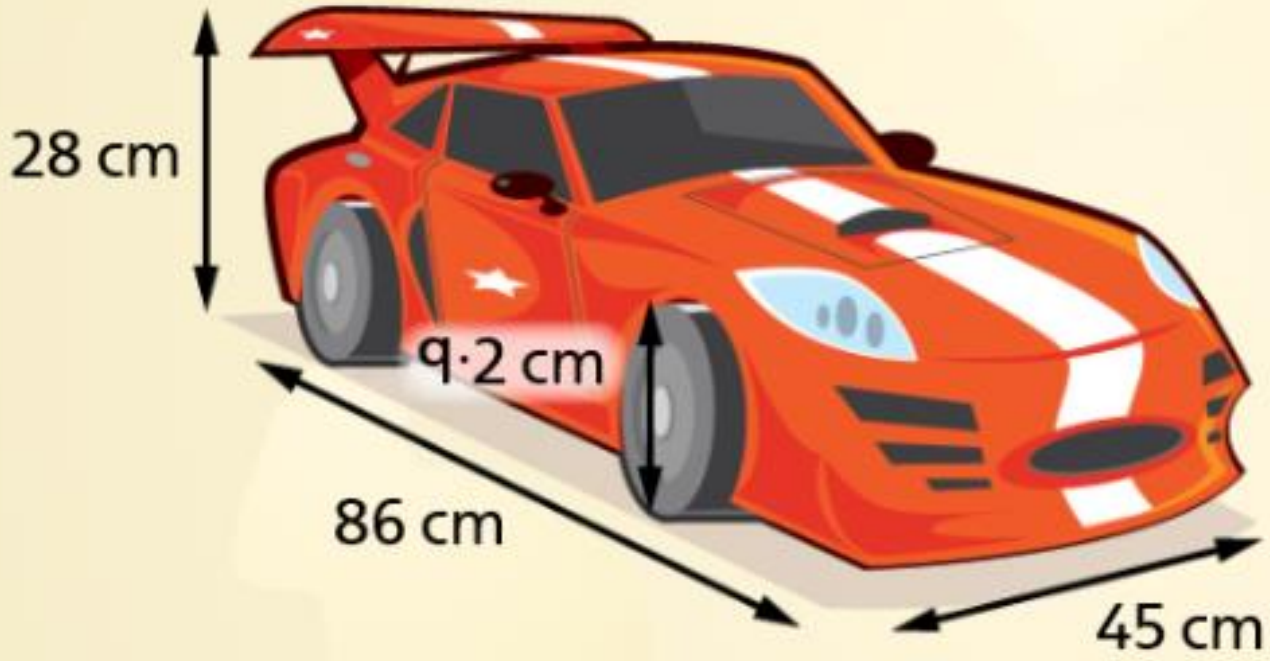
2.6.20

LO: Revise scaling, using mental strategies for multiplying and dividing

1) Work through slides 4-6

2) Miss Crofton p 27 (slide 8)
Miss McAnally/ Miss Barry p28 (slide 9)

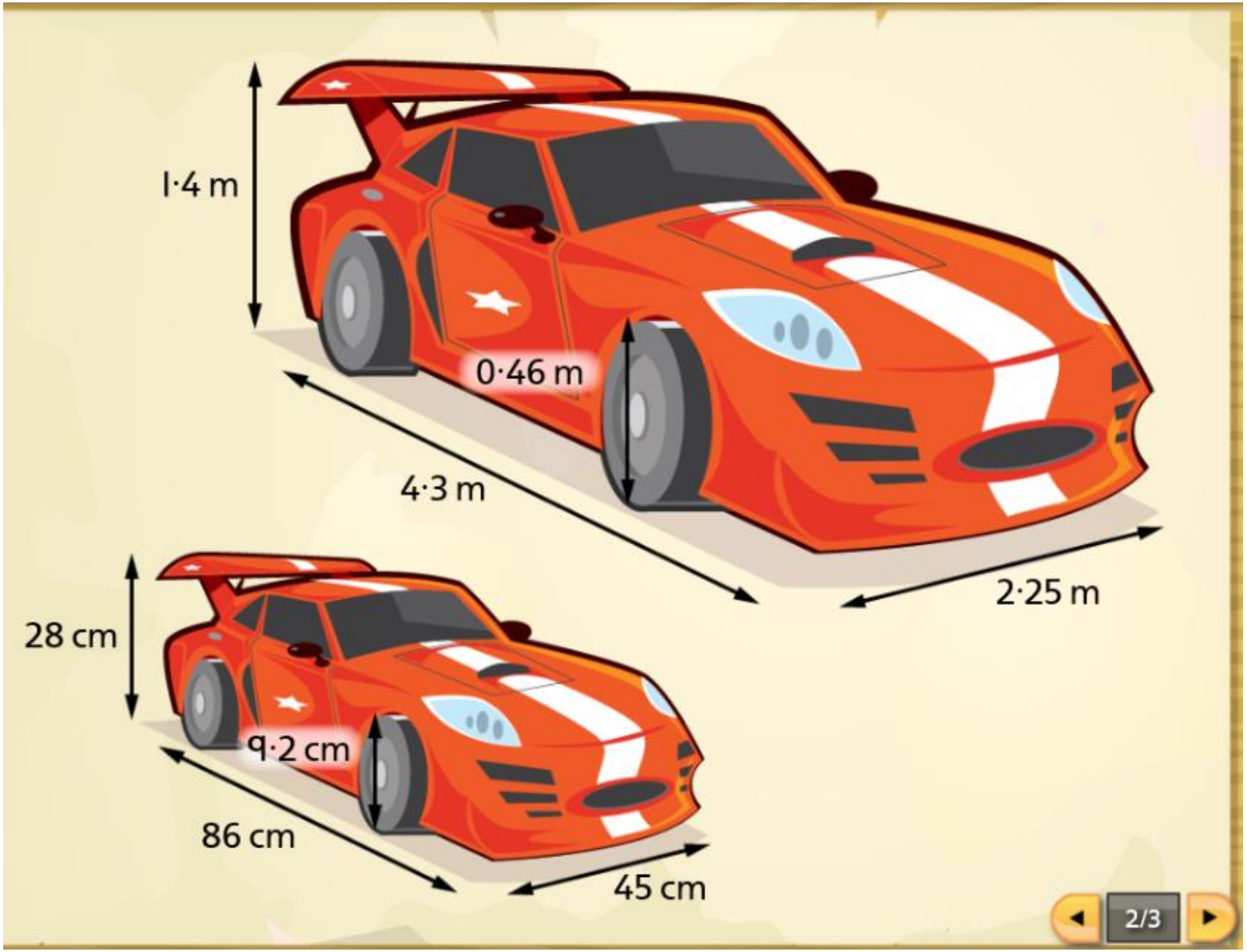
This model is a fifth of the size the manufacturers want the real car to be. They will test the model in a wind tunnel.

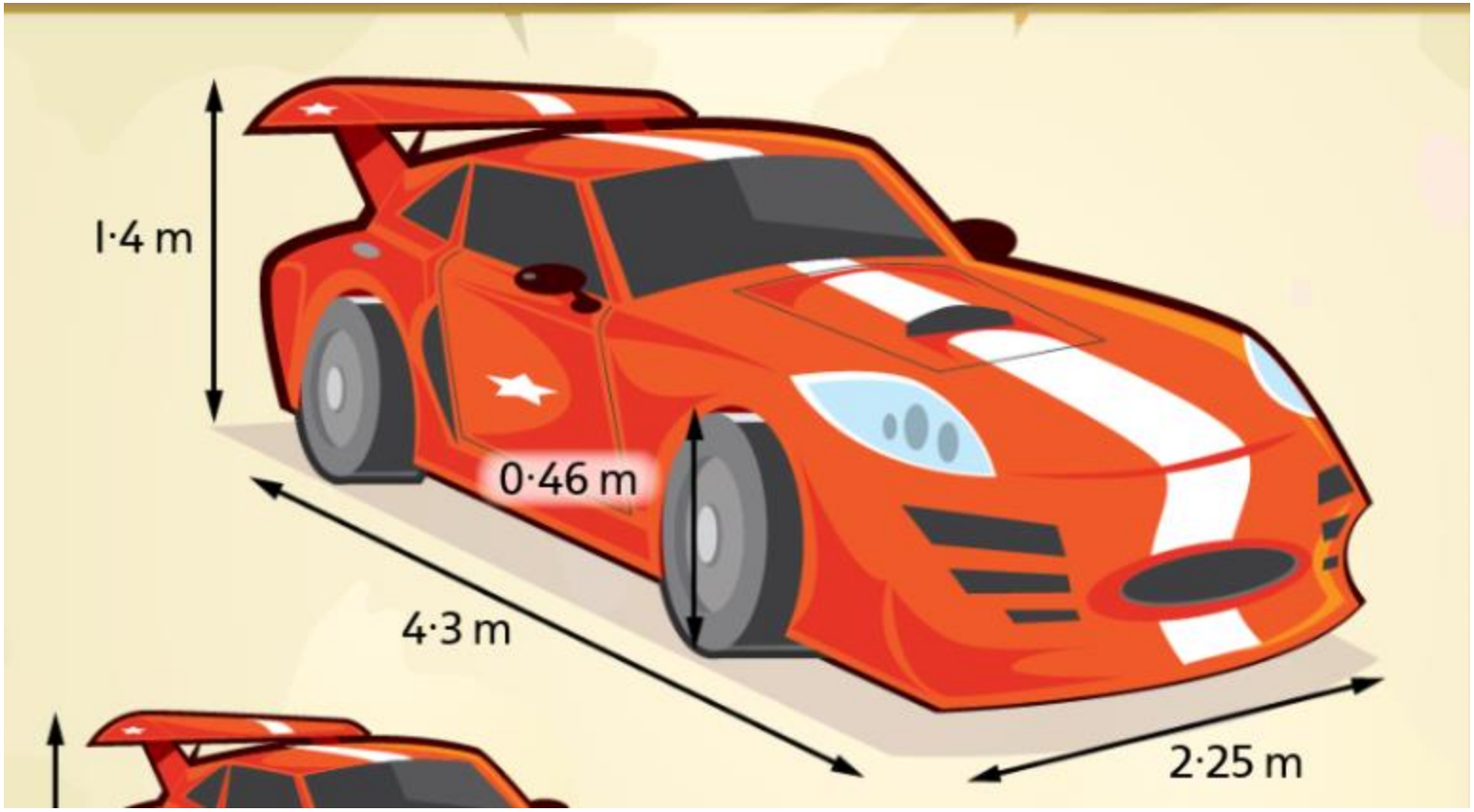


To find the length of the ‘life size’ car we would need to do 86cm x 5

Work out the dimensions of the car.

Check your answers

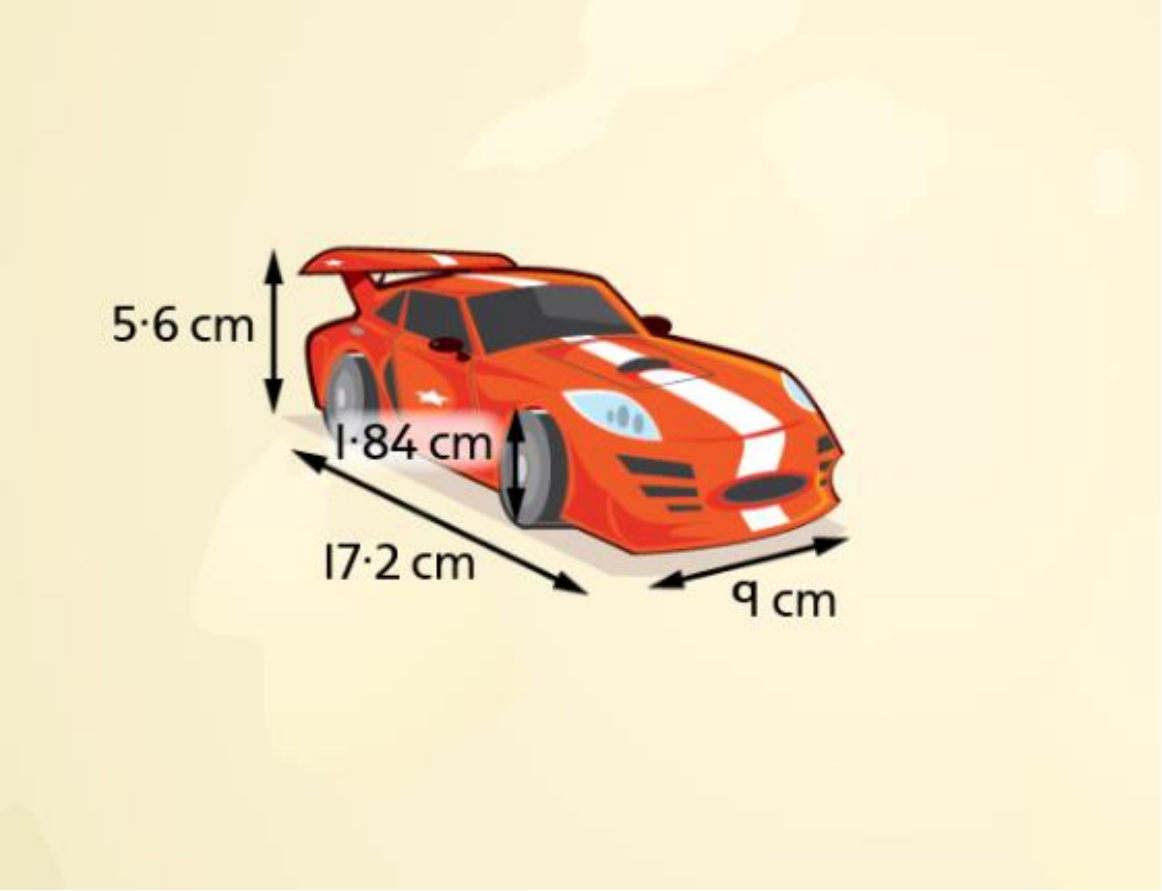




How would you make the real life car into a model a twenty fifth of the size?

Find the dimensions of the model car that is 25 times smaller.

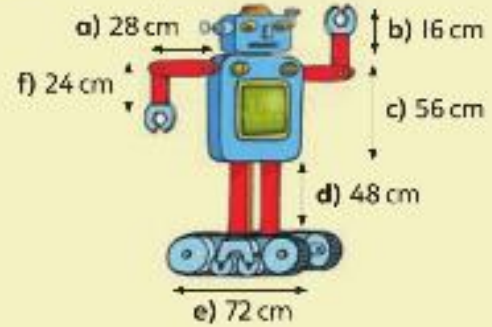
Were you correct?



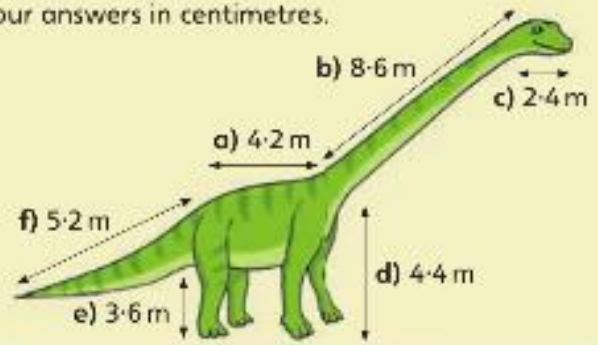
Scaling by multiplying and dividing

Find the new dimensions.

1 A toy company has made a robot. They want to make a giant copy to help advertise their robot. The new robot will be 25 times bigger than the original. Work out the size of the new robot. Give your answers in metres.



2 The same toy company wants to make a toy dinosaur. They want to base it on a real dinosaur. The toy will be 20 times smaller than the real dinosaur. Work out the size of the toy. Give your answers in centimetres.



THINK

What would be a good way to multiply by 2·5? A good way to divide by 2·5? Try out your theory by solving 2·5 × 36 and 85 ÷ 2·5.

I am confident with scaling up and down by multiplying and dividing.

Answer the questions about the village.

1 The model village in Shearton is designed to be a perfect copy of the real village. Each feature has been made to be 25 times smaller. The map shows how tall some features are in the model village. Work out how tall each of these features is in real-life. Write your answer in metres.

Work out the size these models will be.

More features are going to be added. Each of these items will need to be made 25 times smaller to go in the model village. Write the new dimension for each model in centimetres.

2 A roundabout with a diameter of 3·6 m.

3 An office block that is 12·6 m wide.

4 Tennis courts that are 50·4 m across.

5 A memorial that is 4·8 m tall.

THINK

The Eiffel tower is 320 m tall and its base is 104 m by 104 m. What would you need to divide each measurement by to make a model which would fit in the classroom but be big enough for small children to play in?

I am confident with scaling up and down by multiplying and dividing.

3.6.2020

LO: Revise solving problems involving rate

Powerpoint slide 11

Miss Crofton- Q1-4
Miss McAnally/ Miss Barry- ALL

Problems involving rate

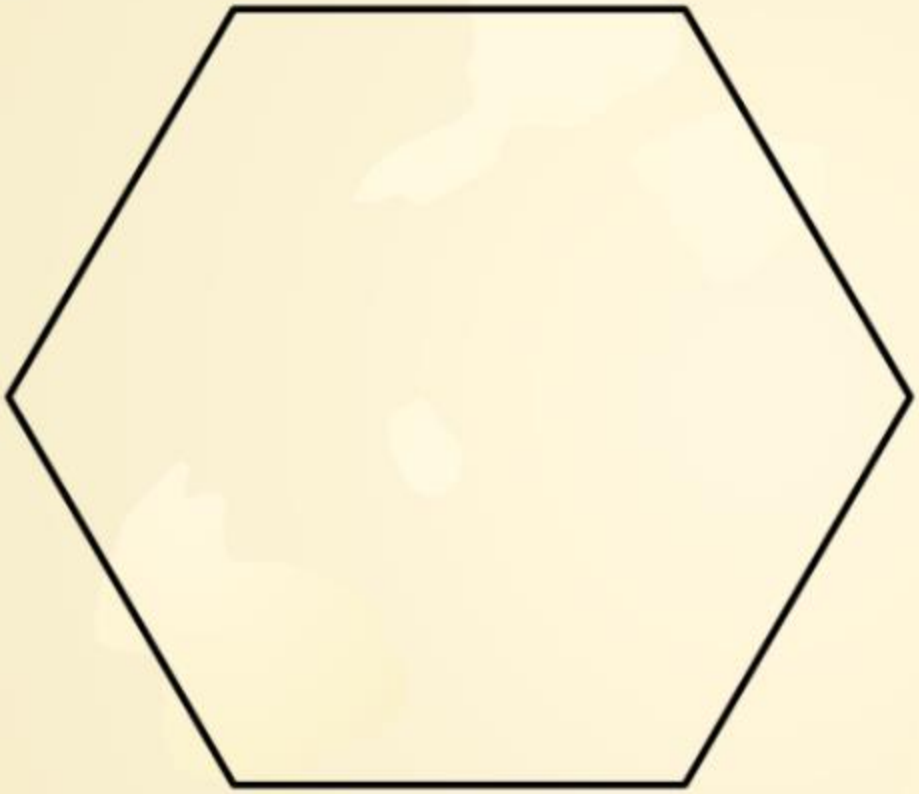
1. Human nails grow at an average rate of 3 mm per month.
   How much do they grow in a year?
   How long will they take to grow 1·5 cm?
2. A Year 6 child was sponsored £1·50 per lap of the swimming pool.
   She raised £45. How far did she swim?
3. A painter is paid £12·50 per hour. How much will he earn in 16 hours?
   How many hours would he need to work to earn £100?
4. A printing machine can print 300 sheets of paper per minute. How many will it print in an hour?
5. The London to Paris train travels at an average speed of 134 miles per hour. It takes 2 hours 30 minutes. What is the distance?
6. One mobile phone tariff is 25p per call for the first 100 calls then 20p per call after that. The other tariff is £42 per month. Talek makes 200 calls in a month. Which is the cheaper tariff for him?

4.6.2020

LO: Revise multiplying pairs of 2-digit numbers and finding factors of 2-digit numbers
LO: Multiply 3-digit and 4-digit numbers including decimals by whole single-digit numbers and solve word problems involving multiplication of money and measures

Miss Crofton- P29 (slide 15)
Miss McAnally- P30 (slide 16)
Miss Barry- P31 (slide 17)


23 × 45 =
56 × 48 =
64 × 42 =



How can we find the perimeter?

Multiplying by integers and decimals

Solve these multiplications.

1. 48 × 13 = ☐
2. 17 × 64 = ☐
3. £36 × 21 = ☐
4. 23 × 63 mm = ☐
5. 24 × 18 kg = ☐
6. 37 × 42 m = ☐
7. £45 × 54 = ☐
8. 38 × 42 l = ☐
9. £76 × 88 = ☐
10. 78 × 36 cm = ☐

Find the area of each playground.

11.

12.

13.

14.

THINK

1	2	3

Put the number cards in the correct places to make this true.

☐4 × ☐☐ = 744

I am confident with multiplying two 2-digit numbers.

Solve these multiplications.

1. 632 × 4 = ☐
2. 735 × 6 = ☐
3. 375 × 3 = ☐
4. 8134 × 5 = ☐
5. 7056 × 8 = ☐
6. 3972 × 9 = ☐
7. £7·39 × 8 = ☐
8. £9·78 × 4 = ☐
9. £79·45 × 9 = ☐
10. £18·57 × 6 = ☐

Now solve these word problems.

11. Sam's dad buys three P.E. t-shirts and three pairs of P.E. shorts. How much does he spend altogether?
12. Banu's mum buys four P.E. t-shirts and two pairs of P.E. shorts. How much does she spend altogether?
13. Mary's nan buys two P.E. t-shirts and four pairs of P.E. shorts. How much does she spend altogether?
14. Alex's mum buys four P.E. t-shirts and three pairs of P.E. shorts. How much does she spend altogether?

I am confident with multiplying 4-digit numbers and decimals by 1-digit numbers.

Find the perimeter of each of these regular shapes.

1 

3 

2 

4 

Now answer these word problems.

5 Clare buys four memory cards from an online store. Each card costs £23·74. There is also a £4·75 delivery charge. How much does she pay in total?

6 An adult ticket to a concert costs £58·67. A child's ticket is £13·24 cheaper than the adult ticket. How much would it cost for two adult and three children's tickets?

7 Sanjeet has just started a new job. He opens a bank account by paying in £50. Each month £68·72 in wages is paid into the account. How much will he have in the account after 6 months if he does not withdraw or spend any money?

8 Which is more expensive and by how much? Five pairs of trainers at £26·38 each or four pairs of boots at £31·89 each?

Multiply 19·91 by 9. Then multiply 29·92 by 9. Then predict the answer to 39·93 × 9. Check your answer. Were you right?

I am confident with multiplying 4-digit numbers and decimals by 1-digit numbers.

5.6.2020

LO: Use a systematic approach to solve problems involving multiplication and division, including long multiplication of 3-digit and 4-digit numbers and decimals

Work through slides 19-21

Miss Crofton- P32 (slide 22)
Miss McAnally- p33 (slide 23)
Miss Barry- p34 (slide 24)

23×462 $23 \times 46 \cdot 2$ $23 \times 4 \cdot 62$

16×39.2

24×5.26

$26 \times 17.38 = 4692.6$

$18 \times 342.2 = 6159.6$

$17 \times 436.4 = 74188$

What is wrong? Why?

Solve these multiplications.

1 24 × 34·2 = ☐

24 × 342

	300	40	2
20	6000		
4			

So 24 × 34·2 = ☐

2 17 × 36·2 = ☐

3 22 × 123·4 = ☐

4 14 × 241·7 = ☐

5 26 × 2·42 = ☐

26 × 242 = ☐

So 26 × 2·42 = ☐

6 14 × 3·21 = ☐

7 24 × 2·79 = ☐

8 A slug crawls 23·2 cm in an hour. How far could it crawl in 24 hours?

9 Ibraheem cycles to and from his office every work day, which is a distance of 19·8 km. He works for 23 days in January. How far did he cycle on those days altogether?

10 Gary is 1·78 m tall. He can throw a javelin a distance that is 42 times his height. How far can he throw a javelin?

I am confident with multiplying 4-digit numbers and decimals by 2-digit numbers.

Write an estimation, then solve each problem.

1. 73·2 × 16 = ☐
2. 69·5 × 22 = ☐
3. 3·77 × 18 = ☐
4. 8·34 × 23 = ☐
5. 705·6 × 29 = ☐
6. 397·2 × 27 = ☐
7. 78·69 × 19 = ☐
8. 98·78 × 26 = ☐

9. Sara pays £5·89 each month in life insurance. How much does she pay in one year? How much does she pay in two years?

10. Pavlo is laying some square tiles, side-by-side in a row. Each tile is 38·4 cm long. How long is a row of 17 tiles?

11. What is the area of a field that is 132·4 m long by 28 m wide?

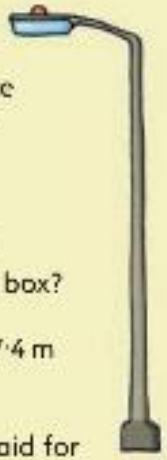
12. Chloe has a bank account that has £600 in it. Each month, for 18 months, she pays £28·57 from the account. How much money is left in the account after that, if no other money is paid in or withdrawn?

I am confident with multiplying 4-digit numbers and decimals by 2-digit numbers.

Solve these word problems.

1. Selina is getting car insurance for the year. If she pays up front she pays £444·11. How much more will she pay in total if she pays £37·46 each month for the year?

2. Along one side of a stretch of motorway, lamp-posts are spaced out so that each is 158·4 m from the next. There are 50 lamp-posts in a line. What is the distance from the first to the last lamp-post? (Clue: There are 49 spaces between them.)



3. A company makes rehydration sachets. Each sachet contains 19·45 g of medication. The company puts 24 sachets in each box. How much medication is in each box?

4. What is the area of a football pitch that measures 107·4 m long and 67 m wide?

5. Jack earns £47·52 each day. How much does he get paid for working 31 days?

6. The kerb stones along the edge of a road each measure 108·2 cm in length. What is the length of 27 kerb stones in a straight line?

7. Jasmine has a bank account that has £800 in it. Each month, for 16 months, she pays a direct debit of £46·77 from the account. How much money is left in the account after that, if no other money is paid in or withdrawn?

8. A large building is made using 84 steel girders, each measuring 14·35 m long. If each girder costs £23 per metre of its length, what is the total cost of the girders?

I am confident with multiplying 4-digit numbers and decimals by 2-digit numbers.

Now send your work to your teacher as ONE DOCUMENT.

1) Make sure you put the date and title on each piece of work.

2) Remember to check your answers and save as a PDF FILE before you send your work.

WORK SHOULD BE SENT ON or BEFORE FRIDAY 5th JUNE 2020

(If you are unable to do this, you should email your teacher and let her know and make sure you submit your work by Midday on Monday 8th June 2020 AT THE VERY LATEST)