



Year 4 Maths Home Learning | Summer Term



W.C. 1st June 2020

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Maths

Use these worksheets to work from and not on. All you need is a piece of paper, pencil and a ruler.

After watching the videos and having a go at the practise activities, have a go at these activities. Depending on your confidence choose Mild, Medium or Spicy (you may wish to have a go at more



Extensions – You may wish to deepen your learning by looking at the Collins Worksheets provided by the BBC too.

Monday

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<https://whiterosemaths.com/homelearning/year-4/>

Adding Fractions

Starter:

Charlie starts at zero and counts forwards in steps of the same fraction each time.

She says the number “one and a half”.

What fraction could Charlie be counting in and how many steps could she have made?

Mild

1a.. Shade the model to complete the following calculation.

$$\frac{3}{8} + \frac{4}{8} = \frac{\square}{\square}$$

--	--	--	--	--	--	--	--

2a. True or false?

$$\frac{3}{9} + \frac{1}{9} + \frac{4}{9} = \frac{8}{27}$$

3a. Match the calculations to the correct answer.

A. $\frac{2}{10} + \frac{1}{10} + \frac{5}{10}$

$\frac{9}{10}$

B. $\frac{3}{10} + \frac{2}{10} + \frac{4}{10}$

$\frac{7}{10}$

C. $\frac{2}{10} + \frac{1}{10} + \frac{3}{10} + \frac{1}{10}$

$\frac{8}{10}$

4a. Fill in the missing numbers to complete the number sentences.

A. $\frac{4}{9} + \frac{1}{9} = \frac{\square}{9} + \frac{3}{9} = \frac{\square}{9}$

B. $\frac{6}{12} + \frac{2}{12} = \frac{\square}{12} + \frac{3}{12} = \frac{\square}{12}$

C. $\frac{2}{6} + \frac{1}{6} = \frac{\square}{6} + \frac{2}{6} = \frac{\square}{6}$

Complete the additions.

a)  $\frac{1}{5} + \frac{2}{5} = \square$

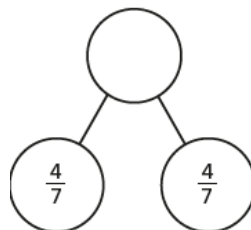
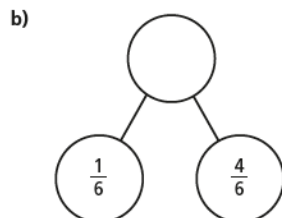
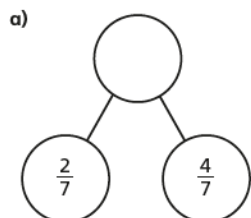
b)  $\frac{1}{5} + \frac{3}{5} = \square$

c)  $\frac{3}{8} + \frac{3}{8} = \square$

d)  $\frac{3}{8} + \frac{1}{8} = \square$

Medium

Complete the part-whole models.



Which part-whole model is the odd one out?

Explain your choice to a partner.

Did you both have the same answer?

Complete the additions.

a) $\frac{3}{7} + \frac{3}{7} = \square$

e) $\frac{8}{11} + \frac{6}{11} = \square = \square$

b) $\frac{3}{7} + \frac{4}{7} = \square = \square$

f) $\frac{4}{11} + \frac{4}{11} + \frac{6}{11} = \square = \square$

c) $\frac{4}{5} + \frac{3}{5} = \square = \square$

g) $\frac{3}{11} + \frac{3}{11} + \frac{8}{11} = \square = \square$

d) $\frac{8}{5} + \frac{6}{5} = \square = \square$

h) $\frac{3}{7} + \frac{3}{7} + \frac{8}{7} = \square = \square$

7a. Match the calculations to the correct answer.

A. $\frac{4}{8} + \frac{1}{8} + \frac{5}{8}$

$\frac{9}{8}$

B. $\frac{6}{8} + \frac{3}{8} + \frac{4}{8} + \frac{2}{8}$

$\frac{10}{8}$

C. $\frac{4}{8} + \frac{2}{8} + \frac{3}{8}$

$1\frac{7}{8}$

8a. Fill in the missing numbers to complete the number sentences.

A. $\frac{3}{7} + \frac{1}{7} = \frac{\square}{7} + \frac{5}{7} = \frac{\square}{7}$

B. $\frac{4}{12} + \frac{5}{12} = \frac{\square}{12} + \frac{6}{12} = \frac{\square}{12}$

C. $\frac{3}{8} + \frac{6}{8} = \frac{\square}{8} + \frac{2}{8} = \frac{\square}{8}$

Spicy

Complete the number sentences.

$\frac{\square}{4} + \frac{\square}{4} = \frac{9}{4}$

a) $\frac{3}{8} + \frac{\square}{8} = \frac{7}{8}$

e) $\frac{4}{9} + \frac{\square}{9} = \frac{13}{9} = 1\frac{\square}{9}$

What could the missing numerators be?

Give four different possibilities.

$\frac{\square}{4} + \frac{\square}{4} = \frac{9}{4}$

$\frac{\square}{4} + \frac{\square}{4} = \frac{9}{4}$

b) $\frac{3}{8} + \frac{\square}{8} = 1$

f) $\frac{4}{9} + \frac{\square}{9} = \frac{\square}{9} = 1\frac{7}{9}$

$\frac{\square}{4} + \frac{\square}{4} = \frac{9}{4}$

$\frac{\square}{4} + \frac{\square}{4} = \frac{9}{4}$

c) $\frac{3}{16} + \frac{\square}{\square} = 1$

g) $\frac{5}{7} + \frac{\square}{7} + \frac{5}{7} = 2$

d) $\frac{4}{9} + \frac{\square}{9} = \frac{11}{9} = 1\frac{\square}{9}$

h) $\frac{5}{7} + \frac{\square}{7} + \frac{5}{7} = 3$

Tommy is adding fractions.



$\frac{3}{4} + \frac{3}{4} = \frac{6}{8}$

Explain why Tommy is incorrect.

Rosie, Whitney and Teddy have each been for a walk.

Rosie walked $\frac{5}{8}$ km.

Whitney walked $\frac{7}{8}$ km.

Teddy walked $\frac{3}{8}$ km.

a) How far did they walk altogether?

$\square$ km

b) Jack also went for a walk.

Altogether the four children walked 3 km.

How far did Jack walk?

$\square$ km

Alex is adding fractions.

$$\frac{3}{9} + \frac{2}{9} = \frac{5}{18}$$



Is she correct? Explain why.

How many different ways can you find to solve the calculation?

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{11}{9}$$

Mo and Teddy are solving:

$$\frac{6}{13} + \frac{5}{13} + \frac{7}{13}$$

Mo



The answer is 1 and $\frac{5}{13}$

Teddy



The answer is $\frac{18}{13}$

Who do you agree with?
Explain why.

Tuesday

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<https://whiterosemaths.com/homelearning/year-4/>

Subtracting Fractions

Starter:

Which one is different?

$$\frac{3}{6} + \frac{3}{6} + \frac{3}{6}$$



$$\frac{3}{4} + \frac{3}{4}$$

$$\frac{5}{4} + \frac{1}{4}$$

Mastery:

I can subtract that have the denominator, pictorial repre help.

Greater Dept

I can apply what learned about fractions when open-ended p

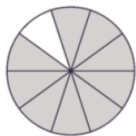
$$\frac{5}{8} + \frac{5}{8}$$



Mild:

1a. Use the image below to help you calculate the subtraction.

$$\frac{9}{10} - \frac{4}{10} = \square$$



2a. Match the correct answer to the calculation below.

$$\frac{5}{6} - \frac{4}{6} = \square$$



A. $\frac{9}{12}$

B. $\frac{2}{6}$

C. $\frac{1}{6}$

4a. Complete the calculations.

3a. True or false?

$$\frac{6}{8} - \frac{2}{8} = \frac{8}{8}$$



A. $\frac{4}{5} - \frac{\boxed{}}{\boxed{}} = \frac{1}{5}$



B. $\frac{6}{7} - \frac{\boxed{}}{\boxed{}} = \frac{1}{7}$



Complete the subtractions.



$$\frac{4}{5} - \frac{1}{5} = \boxed{}$$



$$\frac{4}{5} - \frac{2}{5} = \boxed{}$$



$$\frac{5}{7} - \frac{3}{7} = \boxed{}$$

Medium:

Complete the calculations.

a) $\frac{7}{10} - \frac{3}{10} = \boxed{}$

e) $\frac{9}{11} - \frac{3}{11} = \boxed{}$

b) $\frac{2}{3} - \frac{1}{3} = \boxed{}$

f) $\frac{6}{7} - \frac{4}{7} = \boxed{}$

c) $\frac{6}{6} - \frac{6}{6} = \boxed{}$

g) $\frac{8}{93} - \frac{2}{93} = \boxed{}$

d) $\frac{3}{4} - \frac{1}{4} = \boxed{}$

h) $\frac{10}{991} - \frac{3}{991} = \boxed{}$

Complete the subtractions

a) $\frac{9}{5} - \frac{6}{5} = \boxed{}$

e) $\frac{8}{3} - \frac{4}{3} = \boxed{} = \boxed{}$

b) $\frac{9}{5} - \frac{5}{5} = \boxed{}$

f) $\frac{11}{3} - \frac{4}{3} = \boxed{} = \boxed{}$

c) $\frac{9}{5} - \frac{4}{5} = \boxed{} = \boxed{}$

g) $\frac{14}{3} - \frac{4}{3} = \boxed{} = \boxed{}$

d) $\frac{9}{2} - \frac{4}{2} = \boxed{} = \boxed{}$

h) $\frac{15}{3} - \frac{5}{3} = \boxed{} = \boxed{}$

8a. Complete the calculations.

7a. True or false?

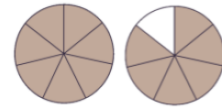
$$1\frac{6}{8} - \frac{2}{8} = 2$$



A. $\frac{12}{5} - \frac{\boxed{}}{\boxed{}} = \frac{4}{5}$

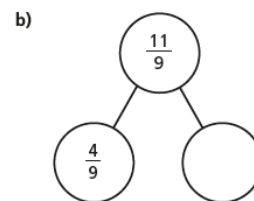
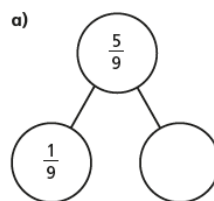


B. $\frac{13}{7} - \frac{\boxed{}}{\boxed{}} = \frac{2}{7}$



Spicy

Complete the part-whole models.



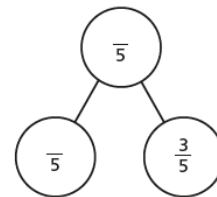
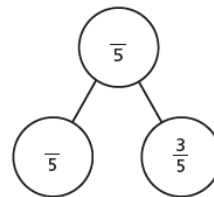
Jack has $2\frac{1}{4}$ kg of potatoes.

He uses $\frac{5}{4}$ kg of potatoes.

How many kilograms does he have left?



Complete the part-whole model in two different ways.



Jack has kg left.

Fill in the missing numerators.

a) $\frac{10}{11} - \frac{\square}{11} = \frac{7}{11}$

d) $\frac{15}{4} - \frac{\square}{4} = 2$

b) $\frac{10}{11} - \frac{\square}{11} = \frac{7}{11} - \frac{4}{11}$

e) $\frac{9}{4} - \frac{1}{4} = \frac{\square}{4} + 1$

c) $\frac{10}{11} - \frac{4}{11} = \frac{\square}{11} - \frac{7}{11}$

f) $\frac{11}{4} - \frac{3}{4} = \frac{11}{3} - \frac{\square}{3}$

Alex and Annie are taking turns playing a computer game.

Annie plays for a total of $2\frac{1}{4}$ hours.

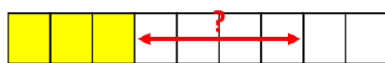
Annie plays for $\frac{3}{4}$ of an hour more than Alex.

How much time do they spend in total playing on the game?

Annie and Amir are working out the answer to this problem.

$$\frac{7}{9} - \frac{3}{9}$$

Annie uses this model.



Amir uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

Match the number stories to the correct calculations.

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$. How much do they eat altogether?	$\frac{7}{8} + \frac{3}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{3}{8}$ less. How much does Dora eat?	$\frac{7}{8} - \frac{3}{8} = -$

How many different ways can you find to solve the calculation?

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} + \frac{\square}{7}$$

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

Wednesday

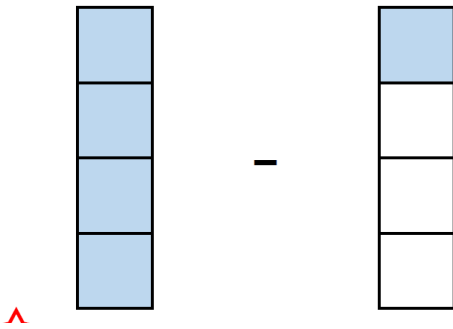
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Subtract Fractions from whole amounts

Mild:

1a. Complete the calculation below.



2a. Circle the difference between:

1 and $\frac{1}{5}$

$\frac{3}{5}$

$\frac{4}{5}$

$\frac{2}{5}$

3a. Tick the calculations which are correct.

A. $2 - \frac{1}{10} = 1 \frac{9}{10}$

☐

B. $3 - \frac{2}{3} = 2 \frac{2}{3}$

☐

C. $4 - \frac{1}{6} = 3 \frac{5}{6}$

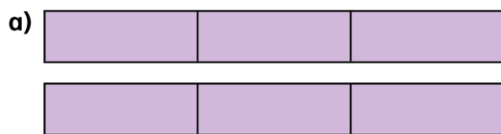
☐

4a. Complete the calculations below.

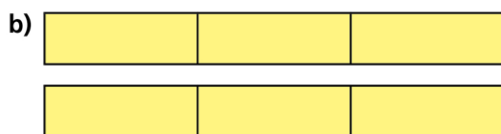
$5 - \frac{3}{4} =$

$6 - \frac{1}{2} =$

Use the bar models to help you subtract the fractions.



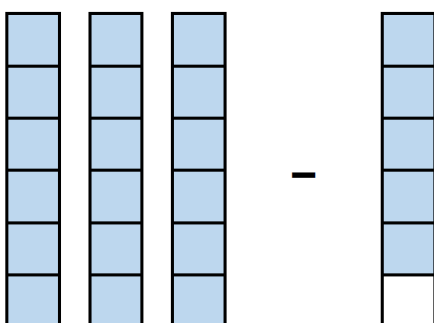
$2 - \frac{2}{3} =$



$2 - \frac{5}{3} =$

Medium:

Complete the calculation below.



Circle the difference between:

$\frac{9}{9}$ and $\frac{5}{9}$

$\frac{5}{9}$

$\frac{3}{9}$

$\frac{4}{9}$

7a. Tick the calculations which are correct.

A. $2 - \frac{6}{7} = 2 \frac{1}{7}$

☐

B. $4 - \frac{5}{8} = 3 \frac{3}{8}$

☐

C. $\frac{18}{6} - \frac{5}{6} = 2 \frac{1}{6}$

☐

Complete the calculations below.

$$\frac{60}{12} - \frac{5}{12} =$$

$$10 - \frac{7}{9} =$$

Match the numbers with a difference of $\frac{3}{4}$

Aisha has 4 pies.



a) Aisha gives $\frac{5}{8}$ of a pie to Mo.

How many pies does Aisha have left?

Aisha has whole pies and of a pie left.

b) Aisha then gives 2 pies to Jack.

Calculate the difference between how much pie Aisha now has and how much pie Mo has.

Spicy:

Alex is subtracting fractions.



$$4 - \frac{3}{4} = \frac{1}{4}$$

Explain why Alex is incorrect.

Complete the calculations.

a) $3 - \text{[]} = 2 \frac{3}{10}$

c) $\text{[]} - \frac{7}{12} = 3 \frac{5}{12}$

b) $4 - \text{[]} = 3 \frac{3}{8}$

d) $\text{[]} - \frac{5}{12} = 13 \frac{7}{12}$

Teddy has 4 litres of juice and 3 jugs.



Teddy pours $\frac{3}{4}$ of a litre into each jug.
How much juice does Teddy have left?

Teddy has litres of juice left.

Whitney has a piece of ribbon that is 3 metres long.

She cuts it into 12 equal pieces and gives Teddy 3 pieces.

How many metres of ribbon does Whitney have left?

Dora is subtracting a fraction from a whole.

$5 - \frac{3}{7} = \frac{2}{7}$ 

Can you spot her mistake?

What should the answer be?

How many ways can you make the statement correct?

$$2 - \frac{\square}{8} = \frac{5}{8} + \frac{\square}{8}$$

Thursday

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<https://whiterosemaths.com/homelearning/year-4/>

Problem Solving with Fractions

Starter:

Which one is different?

$\frac{1}{2}$ of 48

$\frac{2}{3}$ of 36

$\frac{1}{8}$ of 192



$\frac{1}{10}$ of 240

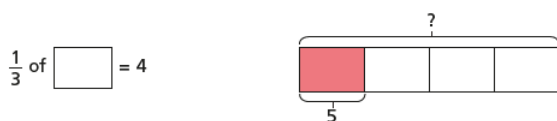
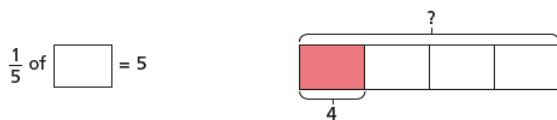
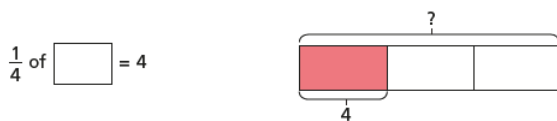
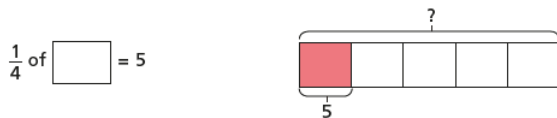
$\frac{1}{5}$ of 115

$\frac{3}{4}$ of 32

Mild

Match the calculations to the bar models.

Work out the missing quantities.



Complete the sentences.

a) When one fifth is 1, the whole is

When one fifth is 10, the whole is

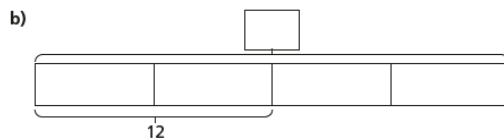
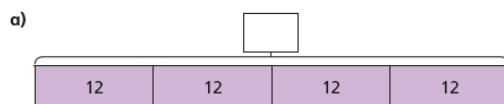
When one fifth is 20, the whole is

b) When $\frac{1}{7}$ is 2, the whole is

When $\frac{1}{7}$ is 4, the whole is

When $\frac{1}{7}$ is 8, the whole is

Complete the bar models and fill in the whole.



Medium

One fifth of a bag of potatoes is 3 potatoes.

Use a bar model and counters to work out how many potatoes are in the whole bag.

Complete the missing values in the table.

Whole	Unit fraction	Non-unit fraction
The whole is 33.	$\frac{1}{3}$ is worth ____.	$\frac{2}{3}$ is worth ____.
The whole is ____.	$\frac{1}{4}$ is worth 9.	$\frac{3}{4}$ is worth ____.
The whole is ____.	$\frac{1}{7}$ is worth ____.	$\frac{3}{7}$ is worth 12.
The whole is 7 kg.	$\frac{1}{10}$ is worth ____g.	$\frac{6}{10}$ is worth ____g.

A large parcel weighs 800g.

A medium-sized parcel weighs two tenths of a kilogram less.

How heavy is a medium-sized parcel?

Complete the calculations.

a) $\frac{1}{2}$ of = 30

e) $\frac{3}{7}$ of = 15

b) $\frac{1}{2}$ of = 15

f) $\frac{5}{7}$ of = 15

c) $\frac{1}{4}$ of = 15

g) $\frac{5}{7}$ of = 35

d) $\frac{3}{4}$ of = 15

h) $\frac{7}{5}$ of = 35

Spicy

Roy is deciding whether he needs to fill his lorry up with fuel.

A full tank of fuel means that he can travel 350 miles before he has to fill up again.

His tank is currently $\frac{4}{10}$ full.

Roy needs to travel another 150 miles to get home.

Can he get home without filling up with fuel?

Dora and Mo have a full bottle of juice.

Dora drinks $\frac{2}{5}$ of the juice.

Mo drinks $\frac{1}{5}$ of the juice.

There is 150 ml of juice left in the bottle.

How much juice was in the full bottle?

ml

Rosie and Ron are collecting red and blue counters.

They have the same number of blue counters.

They have a different number of red counters.



Rosie

I have 18 counters altogether. $\frac{2}{3}$ are blue.

$\frac{3}{4}$ of my counters are blue.



Ron

a) How many counters does Ron have altogether?

b) How many red counters do they each have?

Rosie has red counters.

Ron has red counters.

Ron gives $\frac{2}{9}$ of a bag of 54 marbles to Alex.

Teddy gives $\frac{3}{4}$ of a bag of marbles to Alex.

Ron gives Alex more marbles than Teddy.

How many marbles could Teddy have to begin with?

$$\frac{2}{9} \text{ of } 54 > \frac{3}{4} \text{ of } \boxed{}$$

True or False?

To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8



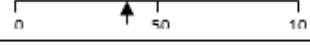
Convince me.

Friday

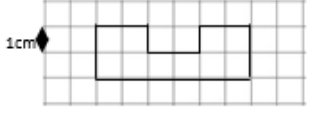
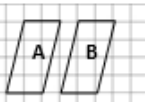
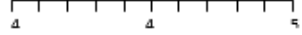
Today you can challenge yourself with the key skills test, along with the challenge activities posted on the **BBC website**

Remember these sheets are only to work from not on so do not worry if you cannot complete a couple of the questions.

Mild

A: Place Value, Add and Subtract	B: Multiply, Divide and Fractions	C: Measure and Geometry
1. What is the missing number? 0 50 150 200 250	11. $72 \div 8 =$	23. One cup holds 330 millilitres of liquid. How much do 3 cups hold? 
2. What is the 3 worth in this number? 513	12. $12 \times 8 =$	22. Tom bought 4 cans of pop that were 60p each. How much did they cost in total? Give your answer in pounds and pence.
3. Write this number in words. 720	13. $34 \times 4 =$	23. Draw hands on the clock to show Twenty five minutes to four. 
4. Estimate the labelled number? 	14. I buy 6 packs of balloons. I have 30 balloons. How many are in each pack?	24. How many right angles make half a turn? 
5. Write a number that is smaller than 648 using the same three digits.	16. What fraction is circled? 	25. Circle the vertical line. 
6. $392 + 10 =$	16. What fraction is shaded? 	
7. $528 - 64 =$	17. What is $\frac{1}{3}$ of 18?	
8. Circle the best estimate to $79 + 101$ 170 180 190 200	18. This shape is in tenths. Shade in $\frac{2}{5}$. 	
9. Use $18 + 34 = 52$ to help solve: $520 - 180 =$	19. Add the fractions. $\frac{3}{9} + \frac{5}{9}$	
10. What is the missing number? $148 - \square = 89$	20. Write the smallest fraction. $\frac{1}{3} \frac{1}{6} \frac{1}{7} \frac{1}{2}$	

Medium and Spicy

A: Place Value, Add and Subtract	B: Multiply, Divide and Fractions	C: Measure, Geometry and Statistics
1. What is the missing number? 18 24 30 42	11. $7 \times 11 =$	21. What is the area of this shape? 
2. What is the missing number? 7,000 8,000 9,000	12. Circle the sum that is the same as 27×12 : $3 \times 4 \times 9$ $3 \times 9 \times 12$	22. Circle the name that describes the smallest angle. Right angle Obtuse angle Acute angle
3. Round this number to the nearest 100: 5,731	13. $293 \times 7 =$	23. To transform shape A onto B: Translate A  units to the
4. What is 1,000 less than 3,293?	14. To work out 53×8 you could do: $\times 8 + 3 \times$	24. Tom rode to his friend's house.  Using the distance - time graph, how long did Tom rest for? 25. How much further was the 2nd part of Tom's journey than the first?
5. What is 3 less than 1?	15. Circle the equivalent fraction to $\frac{1}{7}$. $\frac{3}{2}$ $\frac{5}{3}$ $\frac{7}{5}$	
6. What is the value of the 2 in this number? 3,296	16. Complete the sequence: $\frac{22}{10}$ $\frac{23}{10}$ $\frac{24}{10}$	
7. Write the number 37 in Roman numerals.	17. $\frac{9}{5} + \frac{2}{5}$	
8. $1,235 + 824 =$	18. Write 0.5 as a fraction.	
9. Write the sum to check $1,930 + 383 = 2,313$: $2,313$ $1,930$ 383	19. $8 \div 100 =$	
10. There are 213 people on a train. 28 get on & 49 get off. How many now?	20. Label 4.25cm on the ruler section: 	
Total (A)	Total (B)	Total (C)