

Summer Test 4



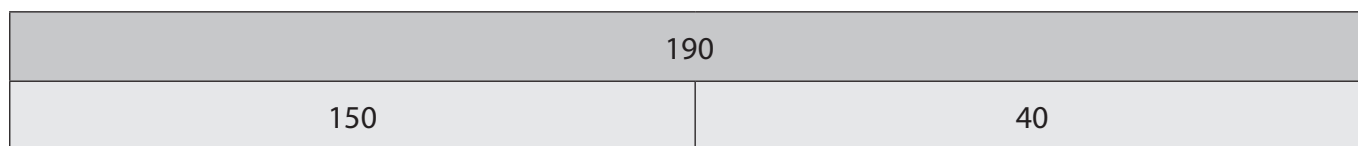
Teacher guidance

Skills and knowledge covered in this test:

- 2N2b** Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.
- 2C7** Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.
- 2C1** Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- 2G2b** Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces.
- 3C3** Estimate the answer to a calculation and use inverse operations to check answers.
- 3N2b** Find 10 or 100 more or less than a given number.
- 3F2** Recognise and show, using diagrams, equivalent fractions with small denominators.
- 3G2** Identify horizontal lines, vertical lines and pairs of perpendicular and parallel lines.
- 3F4** Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$].
- 3S1 / 3S2** Interpret and present data using bar charts, pictograms and tables; Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables.

Focus activity: Addition and subtraction – missing numbers

Use the bar to write four different calculations.



	+		=				-		=	
	+		=				-		=	

- Step 1** Display the question. Establish with the children that this style of question is a 'missing numbers' question. *How can we complete a missing numbers question?* Explain that it involves using our knowledge of known facts but in this question we can also use the bar to help us.
- Step 2** Ask the children to look carefully at the four calculations. *What type of calculations are they? How many missing numbers do we need to find?* Establish that two are addition calculations and two are subtraction calculations.
- Step 3** Ask the children to look at the bar. *What does the bar show? Is the top rod equal to the bottom rod of the bar?* Establish that the top bar shows us the whole and the bottom shows two parts of the whole.
- Step 4** *What addition calculation matches the bar?* Establish that part + part = whole so $150 + 40 = 190$, but we could also write the addition as $40 + 150 = 190$. Use these two answers to model how to complete the first two missing numbers calculations.

Step 5 How many missing numbers calculations do we now have? Establish that we have two subtraction missing numbers calculations to complete. Look at the bar and ask the children how they might write a subtraction calculation to match the bar. Establish that the whole – one part = one part so $190 - 150 = 40$ or $190 - 40 = 150$. Use these two answers to model completing the subtraction missing numbers calculations.

Step 6 Model how to check the answer. Have you written a number in each empty box? Have you used the numbers from the bar to write your calculations? Are all four calculations different?

Question number	Answer	Mark	Domain reference	Relayed focus activity	Additional guidance
1	13, 34, 39, 56, 78	1	2N2b	Autumn Test 1	
2	Circles 2×6	1	2C7	Autumn Test 4	Accept any other clear way of indicating the correct calculation.
3	$20 + 40 = 60$ $40 + 20 = 60$ $60 - 20 = 40$ $60 - 40 = 20$	2	2C1	Summer Test 4	Award 2 marks for all four correct. Award 1 mark for three correct.
4		1	2G2b	Spring test 4	Lines need not touch the numbers exactly, provided the intention is clear. All lines must be drawn correctly for the award of the mark.
5	$619 - 278 = 341$ or $619 - 341 = 278$	1	3C3	N/A	
6	$82 \longleftarrow 92 \longrightarrow 102$ $95 \longleftarrow 105 \longrightarrow 115$	2	3N2b	Spring Test 1	Award 2 marks for all four correct. Award 1 mark for three correct.
7	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	2	3F2	Summer Test 2	Accept any other clear positive way of indicating True, e.g. t, yes or y, and negative way for False, e.g. f, no or n. Award 2 marks for all four correct. Award 2 marks for ticks in the correct boxes and the other box left blank. Award 1 mark for three correct.
8	No, Ben is incorrect because the circle and the hexagon do not have perpendicular lines but the rectangle does have perpendicular lines.	1	3G2	Autumn Test 6	Accept any alternative explanation that gives a similar answer.

YEAR 3 REASONING PRACTICE TESTS

Question number	Answer	Mark	Domain reference	Relayed focus activity	Additional guidance
9	$\frac{3}{8}$	2	3F4	Spring Test 2	<p>Award 2 marks for the correct answer of $\frac{3}{8}$.</p> <p>If the answer is incorrect, award 1 mark for evidence of correct method, e.g.</p> $1 - \frac{3}{8} - \frac{2}{8} =$ <p>or</p> $1 - \left(\frac{3}{8} + \frac{2}{8}\right) =$
10	a) 96 b) 8	a) 1 b) 1	3S1, 3S2	Spring Test 6	

Summer Test 4

Name: Class: Date:

1 Order these numbers from **smallest** to **largest**.

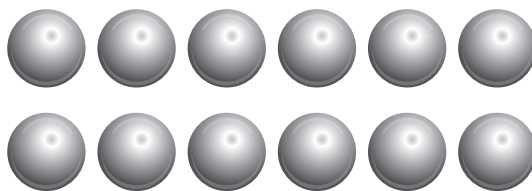
34 56 78 13 39

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smallest **largest**

1 mark

2 Here is an array.

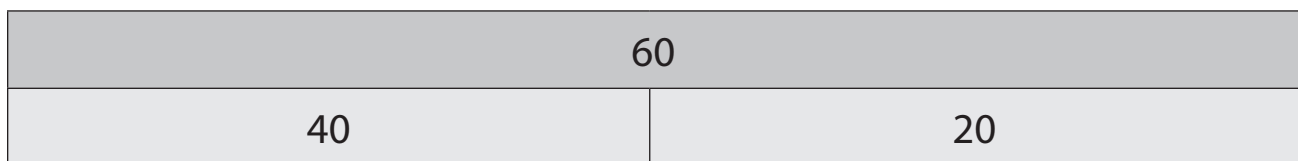


Circle the calculation that matches the array.

$2 + 6$ 2×6 $6 + 2$ $6 \div 2$

1 mark

3 Use the bar to write four different calculations.



<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	=	<input type="text"/>
<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	=	<input type="text"/>

2 marks

Summer Test 4 (continued)

4 Draw lines to match the shape to its number of vertices.

square-based pyramid 0

cube 5

cone 8

cylinder 1



1 mark

5 Write an inverse calculation to check if this number sentence is correct.

$$341 + 278 = 619$$



1 mark

6 Write the missing numbers.

10 less



92

10 more



105



2 marks

Summer Test 4 (continued)

7 Here is a fraction wall.

$\frac{1}{2}$					$\frac{2}{2}$				
$\frac{1}{5}$		$\frac{2}{5}$		$\frac{3}{5}$		$\frac{4}{5}$		$\frac{5}{5}$	
$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$

Tick (✓) the statement if it is **true**.

Cross (✗) the statement if it is **false**.

$\frac{2}{5} < \frac{3}{10}$

$\frac{4}{5} > \frac{6}{10}$

$\frac{1}{2} < \frac{3}{5}$

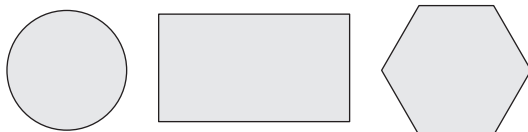
$\frac{9}{10} > \frac{4}{5}$



2 marks

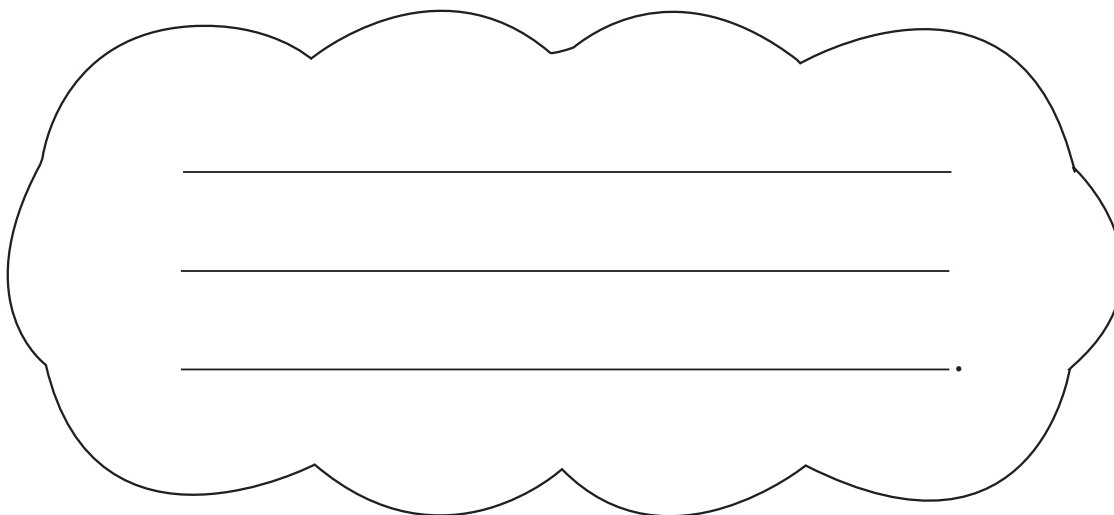
Summer Test 4 (continued)

8 Ben says that none of these shapes has perpendicular lines.



Is Ben correct?

Write **Yes** or **No** and explain how you know.



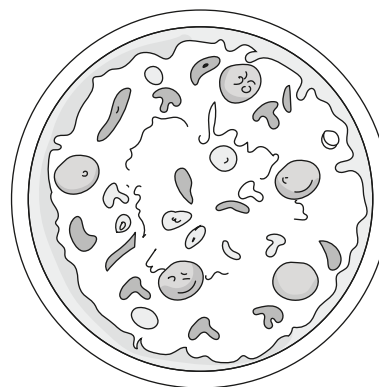
1 mark

9 Ben, Holly and Max order a large takeaway pizza to share.

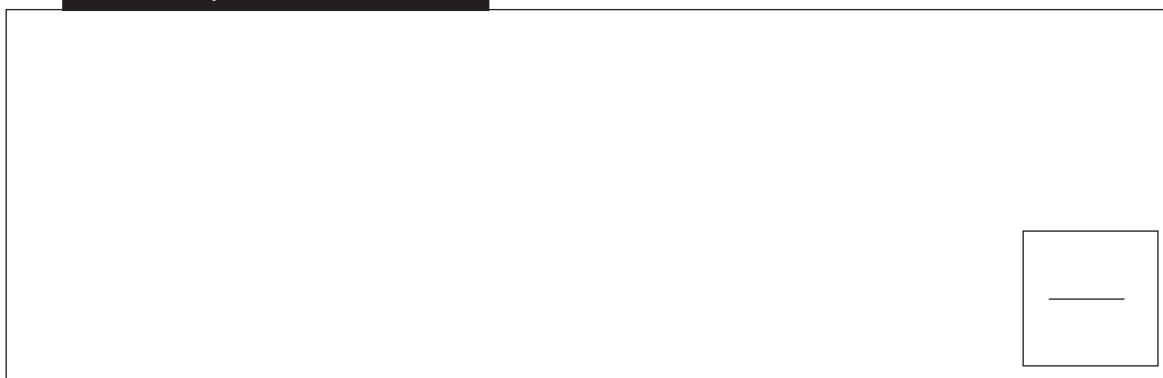
Holly eats $\frac{3}{8}$ of the pizza.

Max eats $\frac{2}{8}$ of the pizza.

How much of the pizza is left for Ben to eat?



Show your method



2 marks

Summer Test 4 (continued)

10 A group of children save their money.

This chart shows how much money they have saved so far.

= £8

Chen	
Meg	
Shiv	
Gavin	

a) What is the **total amount** saved by all four children?

£

1 mark

b) How much more money has Shiv saved than Meg and Gavin together?

£

1 mark

Total marks	/15
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How well did you do?

Colour the numbers of the questions you got correct.

Compare and order numbers from 0 up to 100; use <, > and = signs.	1
Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	2
Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	3
Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces.	4
Estimate the answer to a calculation and use inverse operations to check answers.	5
Find 10 or 100 more or less than a given number.	6
Recognise and show, using diagrams, equivalent fractions with small denominators.	7
Identify horizontal lines, vertical lines and pairs of perpendicular and parallel lines.	8
Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$].	9
Interpret and present data using bar charts, pictograms and tables; Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables.	10