British Maths

1. **[April 2019 qp1 #12]**

Mia and Lily are trying to find the nearest whole number to $\sqrt{120}$

Mia

Lily

Tick (✓) to show who is correct.

Mia	Lily
	✓

Give a reason for your answer.

$10^2 = 100$, $11^2 = 121$ and 121 is closer to 120 than 100

Lily's choice is better 11

2. **[April 2019 qp1 #13]**

Write down all the primes between 60 and 70

61 and 67

3. **[April 2019 qp1 #20]**

Calculate the value of

$2 + 8(40 - 5)$

$2 + 8 \times 35$

$2 + 280 = 282$

282

British Maths

4. **[April 2019 qp1 #23]**

Here is a list of numbers.

–7 –5 –3 2 3 6

Find the **largest positive** number that can be made when two numbers from this list are

(a) multiplied together, $-7 \times -5 = 35$

35 .....

(b) subtracted from each other. $6 - -7 = 13$

13 .....

5. **[April 2019 qp2 #2]**

Work out

$$\frac{14^2+29}{3\times 2^2-7}$$

Use can your calculator

45 .....

6. **[April 2019 qp2 #8a]**

Carlos swims 90 lengths of a swimming pool.

The swimming pool is 25 m long.

Work out the total distance Carlos swims.

Give your answer in kilometres.

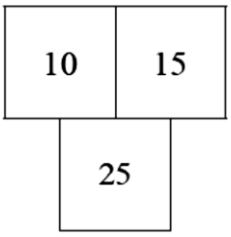
$\frac{90\times 25}{1000} = 2.25$

2.25 ..... km

7. **[April 2018 qp1 #1]**

Here is the rule for these number grids.

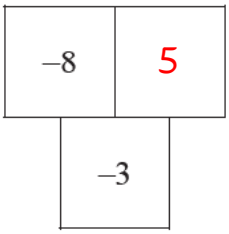
Add the two top numbers to get the number below



10 + 15 = 25

Complete these grids

(a)



8. **[April 2018 qp1 #4]**

A teacher asks her class to work out the answer to

8 + 12 ÷ 4

Mike says that the answer is 5

He is wrong.

Explain why Mike is wrong

Mike added before dividing so he did not use BIDMAS

The correct answer should be 8 + 3 = 11

9. **[April 2018 qp1 #9]**

Use the laws of arithmetic to write numbers in the boxes to make these calculations correct

$4.5 \times 8 = 4.5 \times 2 \times 2 \times$ [2]

$8.84 \times 25 = 8.84 \times 100 \div$ [4]

$6.8 \times 5 = 6.8 \times$ [10] $\div 2$

10. **[April 2018 qp2 #1]**

Write a **negative** number in each box to make the calculation correct

[-6] $\times$ [-3] $=$ 18

There are other correct answers

11. **[April 2018 qp2 #8]**

Saki has 1865 apples.

She packs them into crates.

Each crate can hold 48 apples.

$\frac{1865}{48} = 38.9$

Work out the largest number of crates that she can fill **completely**.

38 ..... crates

12. **[October 2018 qp1 #3]**

Write a number in each box to make a true statement.

$6 - (-2) =$ [8]

$32 \div (-8) =$ [-4]

[-2] $\times (-4) \times 3 = 24$

13. **[October 2018 qp1 #6a]**

Draw a ring around the best estimate of $\sqrt{83}$

8.7 (9.1) 9.5 41.5

14. **[April 2017 qp1 #13]**

360 can be written as $2^x \times 3^y \times 5$, where x and y are positive integers.

Work out the value of x and the value of y.

x = ……3……..

y = ……2……..

15. **[April 2017 qp1 #14]**

Chen throws two six-sided dice.

He records the difference between the two scores.

Complete this table showing the possible outcomes.

Second dice

6	5	4	3	2	1	0
5	4	3	2	1	0	1
4	3	2	1	0	1	2
3	2	1	0	1	2	3
2	1	0	1	2	3	4
1	0	1	2	3	4	5
	1	2	3	4	5	6

First dice

16. **[April 2017 qp2 #9]**

Show that $\sqrt[3]{46}$ is less than $\sqrt{12.9}$

$\sqrt[3]{46} = 3.58$ $\sqrt{12.9} = 3.59$ And $3.58 < 3.59$

17. **[October 2017 qp1 #3]**

Tick (✓) the expression that is the same as $6 + 2 \times e$

$8e$	☐
$2 + 6 \times e$	☐
$2e + 6$	✓
$6 + e^2$	☐

18. **[October 2017 qp1 #4]**

Work out.

$28 \times 36 \div 18$

56

19. **[October 2017 qp1 #13]**

Add together 5 and –1 ..... 5+ -1 = 4

Add together –2 and –3 ..... -2 + -3 = -5

Subtract –3 from 5 ..... 5- -3 = 8

20. **[October 2017 qp1 #14]**

Draw rings around **all** the cube numbers.

6 (8) 9 36 (64)

21. **[October 2017 qp1 #17]**

Work out.

$360 \div (5 \times 2^2 - 10)$ 360 ÷ (5 × 4 − 10) = 360 ÷ (20-10) = 360 ÷ 10 = 36

22. **[October 2017 qp1 #21]**

Write a number in the box to make this calculation correct.

$23 + 4 \times$ [7] $= 51$