



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.

.....
.....

2. [April 2019 qp1 #13]

Write down all the primes between 60 and 70

.....

3. [April 2019 qp1 #20]

Calculate the value of

$$2 + 8(40 - 5)$$

.....



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,

.....

(b) subtracted from each other.

5. [April 2019 qp2 #2]

Work out

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

.....

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.

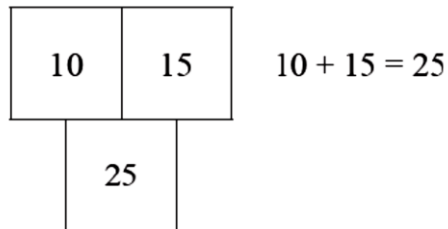
..... km



7. [April 2018 qp1 #1]

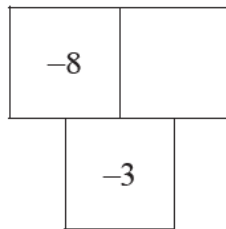
Here is the rule for these number grids.

Add the two top numbers to get the number below



Complete these grids

(a)



8. [April 2018 qp1 #4]

A teacher asks her class to work out the answer to

$$8 + 12 \div 4$$

Mike says that the answer is 5

He is wrong.

Explain why Mike is wrong

.....

.....



9. [April 2018 qp1 #9]

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

$$4.5 \times 8 = 4.5 \times 2 \times 2 \times \boxed{}$$

$$8.84 \times 25 = 8.84 \times 100 \div \boxed{}$$

$$6.8 \times 5 = 6.8 \times \boxed{} \div 2$$

10. [April 2018 qp2 #1]

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

$$\boxed{} \times \boxed{} = 18$$

11. [April 2018 qp2 #8]

Saki has 1865 apples.

She packs them into crates.

Each crate can hold 48 apples.

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

..... crates

12. [October 2018 qp1 #3]

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

$$6 - (-2) = \boxed{}$$

$$32 \div (-8) = \boxed{}$$

$$\boxed{} \times (-4) \times 3 = 24$$



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 .

$x = \dots\dots\dots$

$y = \dots\dots\dots$

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

First dice

16. [April 2017 qp2 #9]

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



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.

$28 \times 36 \div 18$

.....

19. [October 2017 qp1 #13]

Add together 5 and -1

Add together -2 and -3

Subtract -3 from 5

20. [October 2017 qp1 #14]

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

- 6 8 9 36 64

21. [October 2017 qp1 #17]

Work out.

$360 \div (5 \times 2^2 - 10)$

22. [October 2017 qp1 #21]

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

$23 + 4 \times \boxed{} = 51$