

## Year 6 Class 18 questions

Q1

20 students are in a class. 14 play football, 10 play cricket and 2 students don't play either sport.

How many play both sports?

How many play cricket only?

Q2

24 students are in a class. 14 play rugby, 11 play cricket and 5 students don't play either sport.

How many play both sports?

How many play rugby only?

Q3

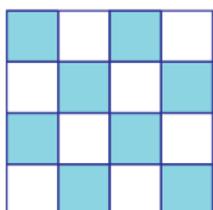
How many even numbers are there between 51 and 61?

Q4

How many even numbers are there between 21 and 53?

Q5

How many squares (of any size) can be found on this square grid?



Grid size	No. of squares
1 × 1	1
2 × 2	5
3 × 3	14
4 × 4	<input type="text"/>

No. of squares =

Q6

Mitchell is 5 years older than Alyssa. If Mitchell is 31 years old, how old is Alyssa?

Q7

A square has an area of  $81 \text{ cm}^2$ . What is its perimeter?

 cm

Q8

A square has an area of  $100 \text{ cm}^2$ . What is its perimeter?

 cm

Q9

A square has an area of  $25 \text{ cm}^2$ . If each side has its length doubled, what is its new area?

  $\text{cm}^2$ 

Q10

6 coins are on a table: 5c, 10c, 20c, 50c, \$1, \$2. How many different amounts can be made up using two of the coins?

Q11

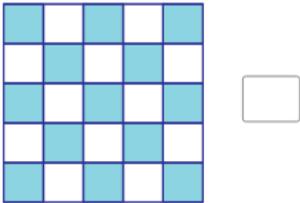
6 coins are on a table: 5c, 10c, 20c, 50c, \$1, \$2. How many different amounts can be made up using three of the coins?

Q12

Four cards numbered 2, 4, 7 and 8 are shuffled and three are dealt face up to form a 3-digit number. List all the possible numbers which are less than 400.

Q13

How many squares (of any size) can be found on this square grid?



Q14

There are 8 teams in a soccer competition. Each team played each of the other teams once. Complete the table to find how many games are played in the competition.

No.of teams	No.of games played
2	1
3	3
4	6
5	10
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>

No. of games played =

Q15

There are 9 teams in a soccer competition. Each team played each of the other teams once. Complete the table to find how many games are played in the competition.

No.of teams	No.of games played
2	1
3	3
4	6
5	10
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>
9	<input type="text"/>

No. of games played =

Q16

I start with a number, divide it by 4, then subtract 10. I am left with 1. Find the number I started with.

Q17

I start with a number, divide it by 8, then add 30. I am left with 34. Find the number I started with.

Q18

Jaya is 4 years older than Anthony and is double Peter's age. If Peter is 9 years old, how old is Anthony?

Q19

Draw a rectangle with an area of  $50 \text{ cm}^2$ . If each side has its length doubled, what is the new area?

$\text{cm}^2$

Q20

Draw a square with an area of  $36 \text{ cm}^2$ .  
If each side has its length halved, what  
is the new perimeter?

cm

Q21

Draw a square with an area of  $144 \text{ cm}^2$ .  
If each side has its length halved, what  
is the new perimeter?

cm

Q22

Using only the digits 2, 3 and 7, how  
many 2-digit numbers can be formed?  
The digits may not be repeated.

Q23

Using only the digits 2, 3, 4 and 6, list all the  
3-digit odd numbers that can be formed.  
The digits may not be repeated.

Q24

What is the largest 3-digit odd number  
that has a digit sum of 15?

Q25

There are five people in a room and each  
person shakes hands with every other  
person once. How many handshakes are  
there altogether?

Q26

There are 4 people in a room and each  
person shakes hands with every other  
person once. How many handshakes  
are there altogether?

Q27

There are 7 people in a room and each  
person shakes hands with every other  
person once. How many handshakes  
are there altogether?

Q28

Josh is 8 years older than Seb and Eve is  
twice Seb's age. Maya is 4 years older than  
Eve. If Maya is 16 years old, how old is Josh?

Q29

Amy is 4 years younger than Rory and Jaya  
is half Rory's age. Bella is 7 years older than  
Jaya. If Bella is 15 years old, how old is Amy?

Q30

Megan is 2 years older than Jacob and Zara  
is half Jacob's age. Ava is 4 years older than  
Zara. If Ava is 12 years old, how old is Megan?