

# Year 7 Class 27 questions

## Q1

The 20 students in Lyla's class donated a total of \$460 to charity.

On average, how much did each student donate? \$  **23**

## Q2

This set of numbers has an average of 16.3.

Fill in the missing number.

7.5, 18.1, 11.2, 15.3, 21.4,  **24.3**

## Q3

There are 7 people in a walking group. Their ages are: 64, 48, 52, 61, 57, 36, 46.

What is the mean age?  **52**

## Q4

Complete the table.

Score $x$	Freq $f$	$fx$
11	5	<input type="text"/> <b>55</b>
12	10	<input type="text"/> <b>120</b>
13	7	<input type="text"/> <b>91</b>
14	5	<input type="text"/> <b>70</b>

$(\Sigma f)$  **27**     $(\Sigma fx)$  **336**

Mean =  (1 d.p.) **12.4**

## Q5

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
72	2	<input type="text"/> <b>2</b>
74	8	<input type="text"/> <b>10</b>
76	11	<input type="text"/> <b>21</b>
78	9	<input type="text"/> <b>30</b>

$\Sigma f =$   **30**

Median =  **76**

## Q6

Rosie reads an average of 3 books per week.

After 8 weeks, how many books has she read in total?

Total =  books **24**

## Q7

Lexi runs an average of 12 kilometres per day.

After 3 weeks, how far has she run in total?

Total =  km **252**

## Q8

In his first 7 games of soccer, Phil scored 3, 1, 0, 2, 1, 3 and 2 goals.

After 8 games, his average was 2 goals per game.

How many goals did Phil score in the 8th game?

**4**

### Q9

Over 5 long distance races, Jack's average time is 62 minutes.  
In the next 3 races, his times are 64, 58 and 56 minutes.

Find Jack's average time over all of his races?

**61**

### Q10

Last week Ruby worked the following hours.

Day	Mon	Tues	Wed	Thurs	Fri
Hours	8	6	9.5	8	7.5

What is the mean number of hours she worked each day? (Answer to 1 decimal place)

Mean =  hours **7.8 hours**

### Q11

Lissie records the number of squats she is able to complete in a minute.

Her results for the last 10 training sessions are:

**25 26 32 34 37 38 42 45 48 51**

What is her mean number of squats?

Mean =  **37.8**

### Q12

Complete the table.

Score $x$	Freq $f$	$fx$
3	17	<input type="text"/> 51
4	27	<input type="text"/> 108
5	31	<input type="text"/> 155
6	23	<input type="text"/> 138
	<input type="text"/>	<input type="text"/>
	$(\Sigma f)$ 98	$(\Sigma fx)$ 452

Mean =  (1 d.p.) **4.6**

### Q13

Complete the table.

Score $x$	Freq $f$	$fx$
3	22	<input type="text"/> 66
4	29	<input type="text"/> 116
5	39	<input type="text"/> 195
6	30	<input type="text"/> 180
	<input type="text"/>	<input type="text"/>
	$(\Sigma f)$ 120	$(\Sigma fx)$ 557

Mean =  (1 d.p.) **4.6**

### Q14

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
40	17	<input type="text"/> 17
42	25	<input type="text"/> 42
44	14	<input type="text"/> 56
46	17	<input type="text"/> 73
48	12	<input type="text"/> 85
	$\Sigma f =$ <input type="text"/>	85

Median =  **44**

**Q15**

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
82	<input type="text"/> 13	13
84	<input type="text"/> 6	19
86	<input type="text"/> 3	22
88	<input type="text"/> 5	27
90	<input type="text"/> 20	47

$$\Sigma f = \text{} \quad 47$$

$$\text{Median} = \text{} \quad 88$$

**Q16**

This set of numbers has an average of 10.

Fill in the missing number.

$$7, \quad 10, \quad \text{} \quad 13$$

**Q17**

This set of numbers has an average of 43.

Fill in the missing number.

$$63, \quad 29, \quad \text{} \quad 37$$

**Q18**

This set of numbers has an average of 79.4.

Fill in the missing number.

$$19.2, \quad 95.8, \quad 74.7, \quad \text{} \quad 127.9$$

**Q19**

Group A (with 7 people), has an average of 6.5. Group B (with 5 people), has an average of 7.2. Group C (with 8 people), has an average of 5.5.

Find the combined average of the three groups.

$$\text{} \quad 6.275$$

**Q20**

The average of 10 numbers was 13.

After a new number was added the average was 15.

What was the 11th number?

$$\text{} \quad 35$$

**Q21**

Carter scores an average of 6 points per game after 14 games.

What score does he need in his next game to increase his average to 7?

$$\text{} \quad 21$$

**Q22**

In his first 4 games of basketball, Nick scores 18, 22, 20 and 20 points.

How many points does he need to score in his 5th game to have a mean of 21 points per game?

$$\text{} \quad 25$$

**Q23**

Pete records the number of hours he practises the piano for each week for 4 weeks: He practises for 4, 5, 3 and 6 hours.

How long does he need to practise for in the 5th week to have a mean of 5 hours practise each week?

7

**Q24**

The mean height of 5 basketball players is 175 cm. When a 6th player was added to the team, the mean height increased to 177 cm.

How tall was the 6th player?

187

**Q25**

Complete the table.

Score $x$	Freq $f$	$fx$
8	9	<input type="text"/> 72
9	19	<input type="text"/> 171
10	20	<input type="text"/> 200
11	12	<input type="text"/> 132

$(\Sigma f)$  60  $(\Sigma fx)$  575

Mean =  (1 d.p.) 9.6

**Q26**

Complete the table.

Score $x$	Freq $f$	$fx$
3	19	<input type="text"/> 57
4	36	<input type="text"/> 144
5	42	<input type="text"/> 210
6	23	<input type="text"/> 138

$(\Sigma f)$  120  $(\Sigma fx)$  549

Mean =  (1 d.p.) 4.6

**Q27**

Complete the table.

Score $x$	Freq $f$	$fx$
12	25	<input type="text"/> 300
11	12	<input type="text"/> 132
10	12	<input type="text"/> 120
13	11	<input type="text"/> 143

$(\Sigma f)$  60  $(\Sigma fx)$  695

Mean =  (1 d.p.) 11.6

**Q28**

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
20	17	<input type="text"/> 17
22	25	<input type="text"/> 42
24	14	<input type="text"/> 56
26	17	<input type="text"/> 73
28	11	<input type="text"/> 84

$\Sigma f =$   84

Median =  23

**Q29**

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
10	8	<input type="text"/> 8
11	16	<input type="text"/> 24
12	7	<input type="text"/> 31
13	12	<input type="text"/> 43
14	5	<input type="text"/> 48

$$\Sigma f = \text{} \quad 48$$

$$\text{Median} = \text{} \quad 11.5$$

**Q30**

Complete the table.

Score ( $x$ )	Freq ( $f$ )	$cf$
62	<input type="text"/> 12	12
64	<input type="text"/> 4	16
66	<input type="text"/> 10	26
68	<input type="text"/> 18	44
70	<input type="text"/> 14	58

$$\Sigma f = \text{} \quad 58$$

$$\text{Median} = \text{} \quad 68$$