

Albert the Astronaut



*Albert's
Measurements
(kg):*

87.1
87.6
86.9
87.0
87.5
87.5
87.2

It is essential that an astronaut's weight is measured as accurately as possible in order to calculate fuel requirements. Albert has measured his weight every day for the last 7 days prior to his mission. Can you help him to work out his mean weight to report back to NASA?



Boris the Baker



*The 9 bags
contain:*

12
10
10
10
13
12
11
13
10

Boris is an excellent baker, famed for his delicious buns. The number of donuts in each bag he makes can vary, so he wants the highest whole number average to advertise to his customers. He has checked how many donuts are in 9 bags, work out the median and mode and see which he should use to put on his sign.



ABCW Presents...

Charlie the Channel Swimmer



Her times:

1 hour 5 mins

1 hour 8 mins

56 mins

1 hour 10 mins

48 mins

Charlie is training for her latest heroic Channel swim. She is trying to make sure she is swimming as consistently as possible. She needs to calculate the range from her last five training swims in minutes. What is it?



abcw presents

Derek the Dentist



*Number of
fillings:*

- 1
- 0
- 1
- 5
- 6
- 3
- 4

Derek is conducting a survey into the average number of fillings sported by his customers. He needs to report back to his boss Desmond the lowest possible average in order to hide the fact he is a shoddy dentist! Calculate the mean, median and mode of the 7 customers he saw that afternoon and help him decide which he should use in his report.



Egbert the Engineer



The last 6 chimes:

98
100
104
88
101
109

Egbert has been assigned his biggest job yet. He has been hired to work on Big Ben as it has not been working up to scratch lately. He has measured the decibel rating of each one o'clock chime over the last six days. His boss Ethel has told him he needs a mean rating of 100 decibels over the week. How loud does today's one o'clock chime need to be in order to achieve his goal?



Florence the Financial Advisor



*Her last 5
customers made:*

£90
£88
£88
£101
£304

Florence is trying to advertise her agency as best she can (she isn't very good!). She has recorded how much her last 5 customers have made from their £100 investments. Which average (mean, median or mode) should she use on her website to attract more customers, and what is the price she should quote?

Florence did get the hang of it by the fifth customer!



Gerard the Gym Instructor



Number of press ups by each player:

23
50
45
34
12
35
42
60
56
45
34

Gerard is charged with training his local football team. The team's manager wants to know the mean number of press-ups done in one minute from the 1st team in order to prove to the chairman that he needs a gym instructor on the pay roll (Gerard is the manager's son!).

What is it?



Ingrid the Interior Designer



Her last seven jobs paid:

- £4000
- £2000
- £1500
- £5000
- £4000
- £3500
- £4300

Ingrid has recorded how much she has been paid for her last seven jobs. She wants the lowest average price to quote on her new website to attract more customers. Should she use the mean, median or mode in order to do this?



Judy the Juggler



Her five trials:

1min 50secs

1min 8secs

3mins 56secs

2mins 34secs

3mins 40secs

Judy is planning her next death-defying juggling act to audition for next years Britain's Got Talent. She needs to ensure her consistency of how long she can juggle for is up to scratch.

She times five trials, but what is the range in seconds?



Kevin the Kayak Instructor



ChrisMorinPhotography.com

The six times (in seconds):

- 45
- 89
- 101
- 67
- 91
- 120

Kevin runs hour long kayaking lessons and is looking to rank his six best kayakers by their time over the course. If he does this, what would the median time be? Kelvin, the boss, uses this measure as an indicator of Kevin's coaching skill.



Leona the Lorry Driver



*Number of parcels
from each job:*

12
9
6
7
12
9
10
5
6

Leona picks up lots of packages to deliver from each of her customers. She wants to know the modal number of parcels she picks up from each job in order to compile her monthly report. Can you see why Leona could be confused this month? What should she do?



Marty the Mechanic



*The pressures in
the first three tyres:*

29psi

32psi

31psi

Marty needs to ensure that his customer's tyres have the correct pressure. He needs a mean pressure of at least 31psi for the four tyres. He has measured the first three tyres, what is the smallest possible pressure he can measure in the fourth tyre in order to pass the car?



Harold the Hairdresser



*His last 10
customers
requested:*

- 2
- 2
- 4
- 1
- 1
- 5
- 4
- 2
- 3
- 2
- 1

Harold can only afford to replace one blade from his hair-clipping set. He records the most asked for setting from his last 10 customers. Based on the responses which blade should he replace and which average should he use to calculate it?



Nelly the Naval Officer



*Number of
missiles:*

34

34

35

66

89

4

56

Nelly needs to calculate the median number of missiles across the seven ships in her fleet. Can you help her to do this?



Ollie the Optician



-0.5
2.0
2.5
-1.5
0
0
1.0
4.5

Ollie needs to report the mean lens strength of his customers to the Association of British Opticians. Calculate the mean from the survey of today's customers.



Peter the Paramedic



Peter's last 6 times rounded to the closest minute are:

2
20
31
45
8
26

Peter has to give his average response time to the local news station as they are running a news report on the county's best ambulance service. Calculate the mean, mode, median and range and decide which average shows Peter's ambulance service in the best light.



Quentin the Quarryman



Drilling depth in meters:

2
12
6
10
4
9
2

Quentin is a self employed quarryman doing contracted work for a new company. His employer wants to ensure that he is a good worker so asks for his average drilling depth for the last 7 days. Calculate the mean, mode median and range and decide which would be the best average to give his boss.



Roger the Rugby Player



Roger's manager has set his rugby team's tries target at a mean of 5 tries per game for the first 4 games of the season. If the team has scored this number of tries for the first three games, how many tries do they need to score in the fourth to meet their target?

In the first three games they have scored this number of tries:

4

7

1



Sally the Stuntwoman



Earning per film:

1000

8000

7500

3200

5000

8000

600

200

Sally is designing a website to advertise her services as a stuntwoman. She wants to be paid as much as possible and so is giving her average charge based on the last 8 films she has done. Calculate the mean, mode, median and range and decide which would be the best charge to put on her website.



Tony the Taxi Driver



Tony is filling in paperwork for his taxes and has been asked to declare his modal fare.

Find the modal class from the frequency table.

Cost	Frequency
£0-10	8
£ 10-20	6
£20-30	5
£30-40	6
£40 +	2

Umberto the Umpire



Number of wickets lost	Tally
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Umberto needs to calculate the mean number of wickets lost in the thirty 50 over games played this season. He has recorded the number of wickets lost for each match in a tally chart, can you work out the mean?



Victor the Veterinarian



The length of his last 6 dogs:

1.43m

1.05m

34cm

56cm

89cm

1.1m

Victor is browsing the Vet's Catalogue for new cages for dogs. He needs to find the range of dog lengths for the dogs that belong to his practice so that he can decide on which cages to order.



Wendy the Wedding Planner



Wendy is planning a client's wedding, she can only select one meal, select which average would be best to satisfy the most guests.

Menu options	Frequency
Roast beef	14
Roast lamb	16
Coq au vin	11
Vegetable bake	5



Xander the X-ray Technician



Xander has to report the mean radiation exposure levels over the past 7 days. Use the given data to calculate this.

Exposure (mSv):

Day 1: 0.09

Day 2: 0.6

Day 3: 0.71

Day 4: 0.09

Day 5: 0.02

Day 6: 0.8

Day 7: 0.99



ABCW Presents...

Yogi the Yachtsman



Times:

2min 4sec

4min 32sec

3min 20sec

2min 59sec

3min 3sec

Yogi is calculating his mean speed over his practice course for the last five days. Use the times to calculate his average course speed in seconds.



abcw presents

Zelda the Zoologist



Zelda's boss suspects that she is over feeding the animals in the zoo. She has been asked to report the lions' weights to see whether they are overweight. Which average should she use to report back?

Weight (kg):

256

278

265

262

241

