Question 1: Write down the lower bound and the upper bound for each of the following:

(a) 4g measured to the nearest gram
(b) 12cm correct to the nearest centimetre
(c) 75 miles given to the nearest mile
(d) 50kg measured to the nearest 10kg
(e) 130 seconds given the nearest 10 seconds
(f) 225km given to the nearest 5km
(g) 400ml given to the nearest 100ml
(h) 1900 hours correct to the nearest 10 hours
(i) 2700mm measured to the nearest 100mm
(j) 5000km correct to the nearest 100km
(k) 28000kg measured to the nearest 10kg
(l) 30000km/h given to the nearest 10000km/h

Question 2: Write down the lower bound and the upper bound for each of the following:

(a) 80 people given to the nearest 10 people
(b) £10 given to the nearest pound
(c) 500 chairs correct to the nearest 100 chairs
(d) 14000 flights given to the nearest 1000 flights
(e) £29000 given to the nearest £100
Question 3: Write down the lower bound and the upper bound for each of the following:

(a) 3.8cm measured to the nearest 0.1 centimetre
(b) 15.2 seconds to the nearest tenth of a second
(c) 6.4g rounded to one decimal place
(d) 515.9kg correct to one decimal place
(e) 0.07 seconds rounded to two decimal places
(f) 5.26mm measured to the nearest 0.01mm
(g) 24.091kg correct to three decimal places
(h) 8cm measured to the nearest 0.1cm

Question 4: Write down the lower bound and the upper bound for each of the following:

(a) 4 miles correct to 1 significant figure
(b) 30cm rounded to 1 significant figure
(c) 900ml given to 1 significant figure
(d) 0.2m given to 1 significant figure
(e) 14 hours given to 2 significant figures
(f) 280g correct to 2 significant figures
(g) 42000km rounded to 2 significant figures
(h) 748 gallons correct to 3 significant figures
(i) 400m rounded to 2 significant figures
(j) 800kg given to 2 significant figures
(k) 290000km/h given to 4 significant figures
(l) 0.024 correct to 2 significant figures
(m) 15.1 kilometres rounded to 3 significant figures
(n) 100g correct to 1 significant figure

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Question 1: Declan is considering buying a sofa that is 207cm long. The space that Declan wants to the sofa is 210cm to the nearest 10cm. Should Declan buy the sofa?

Question 2: Mr Jones wants to buy a notebook for every student in year 11. He knows there are 300 students in year 11 to the nearest 100. What is the greatest possible number of notebooks that he would have to buy?

Question 3: The length of a field is 400m to the nearest 10m. Rebecca says the lower bound is 350m and the upper bound is 450m. Is she correct?

Question 4: The table shows the prices of posting large letters. Gerard wants to post two large letters:
- a large letter weighing 230g to the nearest 10 grams
- a large letter weighing 500g to the nearest 10 grams

(a) What is the smallest possible price for posting both large letters?
(b) What is the greatest possible price for posting both large letters?

Question 5: Below is a question that was posted online and the results. Explain which answer you agree with.

A number has been rounded to 10, correct to 1 significant figure. What are the lower and upper bounds?

- 30% 5 and 15
- 55% 9.5 and 10.5
- 12% 9.5 and 15
- 3% 7.5 and 12.5

397 votes • Final results

Answers

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