

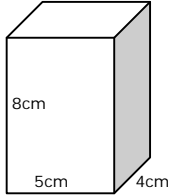
Round the following to 1 significant figure (S.F)

- (i) 251 \_\_\_\_\_
- (ii) 0.43 \_\_\_\_\_
- (iii) 12.6 \_\_\_\_\_

Round the following to 2 significant figures (S.F)

- (i) 231 \_\_\_\_\_
- (ii) 194 \_\_\_\_\_
- (iii) 1244 \_\_\_\_\_

A plank of wood is 39m by 21m correct to the nearest m	Lower Bounds	Upper Bounds	Maximum Area	Minimum Perimeter
John leaves the house at 8:03 and returns at 8:21 from his run accurate to the nearest minute	Lower Bounds	Upper Bounds	Maximum time or run	Minimum time of run
A car travels 180km in 110 minutes. Both are accurate to 2 S.F	Lower Bounds	Upper Bounds	Max average speed	Min Average speed
x = 1.2 y = 45 z = 0.15 All correct to 2 S.F ★	Lower Bounds	Upper Bounds	Max value of $\frac{xy}{z}$	Min value of $yz^2$
A bottle of Rum holds 0.8ltrs, a glass holds 90ml. Both are correct to 2 SF  (tip-convert units) Does the accuracy influence the final answer in any way?	Lower Bounds	Upper Bounds	Max number of glasses that can be filled	Min number of glasses that can be filled

The box below has a length of 4cm, width of 5cm and a height of 8cm all correct to the nearest mm. The box is closed  	Lower Bounds	Upper Bounds	Max Volume of box	Min total surface area of the box
£46500 was won and shared between 1200 people. Both are measure correct to 3 SF	Lower Bounds	Upper Bounds	Work out the difference between the best possible scenario for each person and the worst	
A long Jumper takes off 8cm behind the board and lands 7.04 mts into the pit. Both are accurate to the nearest cm	Lower Bounds	Upper Bounds	What is the longest he could have jumped?	What is the shortest he could have jumped?
The area of a rectangle is 56cm correct to 1cm One length is given to be exactly 8cm	Lower Bounds	Upper Bounds	Find the max length of the missing side	Find the min length of the missing side

On the back of the page draw an 8cm line accurately and show the bounds that represent:

4cm correct to 1 SF	2.5cm correct to 2 SF	0.35 correct to 2 SF		
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★ = nasty!


**ANSWERS – PLEASE ROUND AT YOUR DISCRETION**

Round the following to 1 significant figure (S.F)

- (iv) 251 \_\_\_\_\_ 300
- (v) 0.43 \_\_\_\_\_ 0.4
- (vi) 12.6 \_\_\_\_\_ 10

Round the following to 2 significant figures (S.F)


- (iv) 231 \_\_\_\_\_ 230
- (v) 194 \_\_\_\_\_ 190
- (vi) 1244 \_\_\_\_\_ 1200

A plank of wood is 39m by 21m correct to the nearest m	Lower Bounds 38.5 20.5	Upper Bounds 39.5 21.5	Maximum Area 849.25m <sup>2</sup>	Minimum Perimeter 118 m
John leaves the house at 8:03 and returns at 8:21 from his run accurate to the nearest minute	Lower Bounds 8:02:30 8:20:30	Upper Bounds 8:03:30 8:21:30	Maximum time or run 19 mins	Minimum time of run 17 mins
A car travels 180km in 110 minutes. Both are accurate to 2 S.F	Lower Bounds 175km 105 mins	Upper Bounds 185km 115 mins	Max average speed 1.761904...kpm	Min Average speed 1.521739...kpm
x = 1.2 y = 45 z = 0.15 All correct to 2 S.F 	Lower Bounds X= 1.15 Y = 44.5 Z = 0.145	Upper Bounds X= 1.25 Y = 45.5 Z = 0.155	Max value of $\frac{xy}{z}$ 392.241... (11375/29)	Min value of $yz^2$ 0.9356125
A bottle of Rum holds 0.8ltrs, a glass holds 90ml. Both are correct to 2 SF  (tip-convert units)	Lower Bounds 795ml 89.5 ml	Upper Bounds 805ml 90.5ml	Max number of glasses that can be filled 8.9944 therefore 8	Min number of glasses that can be filled 8.78453 therefore 8  <i>doesn't influence answer</i>

The box below has a length of 4cm, width of 5cm and a height of 8cm all correct to the nearest mm. The box is closed	Lower Bounds 39.5mm 49.5mm 79.5mm	Upper Bounds 40.5mm 50.5mm 80.5mm	Max Volume of box 164642.625mm <sup>3</sup>	Min total surface area of the box 18061.5mm <sup>2</sup>
£46500 was won and shared between 1200 people. Both are measure correct to 3 SF	Lower Bounds £46450 1195	Upper Bounds £46550 1205	Work out the difference between the best possible scenario for each person and the worst  £0.40625.. Therefore ~ 41p	
A long Jumper takes off 8cm before the board and lands 7.04 mts into the pit. Both are accurate to the nearest cm	Lower Bounds 7.5cm 703.5cm	Upper Bounds 8.5cm 704.5cm	What is the longest he could have jumped?  7.13m or 713cm	What is the shortest he could have jumped?  7.11m or 711cm
The area of a rectangle is 56cm correct to 1cm One length is given top be exactly 8cm	Lower Bounds 55.5cm	Upper Bounds 56.5cm	Find the max length of the missing side  7.0625cm	Find the min length of the missing side  6.9375cm

On the back of the page draw an 8cm line accurately and show the bounds that represent:

4cm correct to 1 SF	2.5cm correct to 2 SF	0.35 correct to 2 SF		
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 = nasty!