



Timester Challenge

Error Intervals



The length of a car, l , is 348.6cm correct to one decimal place.
Write down the error interval for the width of the car.



_____ \leq _____ $<$ _____ **Bronze** ★

Jamie ran the 100m in 21.2 seconds, correct to 3 significant figures. Write down the error interval for the time in t seconds.

Silver ★

A bag of wheat, w , weighs 23.8kg truncated to 3 significant figures. Write down the error interval.

Gold ★

The speed v of a plane is 926km/h correct to the nearest km/h . Write down the inequality to show the error interval for v .



_____ \leq _____ $<$ _____ **Bronze** ★

A number x , rounded to 2 significant figures, is 230. Write down the error interval for x .

Silver ★

A number, y , truncated to the nearest whole is 36. Write down the error interval for y .

Gold ★



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Error Intervals

Answers



The length of a car, l , is 348.6cm correct to one decimal place.
Write down the error interval for the width of the car.

$$348.55 \leq l < 348.65$$



Bronze ★

Jamie ran the 100m in 21.2 seconds, correct to 3 significant figures. Write down the error interval for the time in t seconds.

$$21.15 \leq t < 21.25$$

Silver ★

A bag of wheat, w , weighs 23.8kg truncated to 3 significant figures. Write down the error interval.

$$23.8 \leq w < 23.9$$

When truncating you don't round. You literally cut the rest off. Because it's been truncated the number could have been $23.80, 23.81, \dots, 23.87, 23.88$ or 23.89 .

Gold ★

The speed v of a plane is 926km/h correct to the nearest km/h . Write down the inequality to show the error interval for v .

$$925.5 \leq v < 926.5$$



Bronze ★

A number x , rounded to 2 significant figures, is 230. Write down the error interval for x .

$$225 \leq x < 235$$

Silver ★

A number, y , truncated to the nearest whole is 36. Write down the error interval for y .

$$36 \leq y < 37$$

When truncating you don't round. You literally cut the rest off. Because it's been truncated the number could have been $36.0, 36.1, \dots, 36.7, 36.8$ or 36.9 .

Gold ★