



Error Intervals



← REVISE THIS TOPIC

1 When rounded to 2 decimal places, $n = 3.17$
Complete the error interval for n . [2 marks]

3.165 $\leq n <$ 3.175

2 When rounded to 1 decimal place, $p = 6.2$
Complete the error interval for p . [2 marks]

6.15 $\leq p <$ 6.25

3 When rounded to 2 decimal places, $T = 8.52$
Complete the error interval for T . [2 marks]

8.515 $\leq T <$ 8.525

4 When rounded to 1 decimal place, $k = 3.1$
Complete the error interval for k . [2 marks]

3.05 $\leq k <$ 3.15





5 When rounded to 1 decimal place, $r = 6.0$
Complete the error interval for r . [2 marks]

$$\underline{5.95} \leq r < \underline{6.05}$$

6 When rounded to 3 decimal places, $m = 4.292$
Complete the error interval for m . [2 marks]

$$\underline{4.2915} \leq m < \underline{4.2925}$$

7 When rounded to 2 decimal places, $v = 3.07$
Complete the error interval for v . [2 marks]

$$\underline{3.065} \leq v < \underline{3.075}$$

8 When rounded to 2 decimal places, $h = 0.71$
Complete the error interval for h . [2 marks]

$$\underline{0.705} \leq h < \underline{0.715}$$





9 When rounded to the nearest integer, $x = 23$
Complete the error interval for x . [2 marks]

$$\underline{22.5} \leq x < \underline{23.5}$$

10 When rounded to the nearest 10, $y = 70$
Complete the error interval for y . [2 marks]

$$\underline{65} \leq y < \underline{75}$$

11 When rounded to the nearest 10, $d = 72000$
Complete the error interval for d . [2 marks]

$$\underline{71995} \leq d < \underline{72005}$$

12 When rounded to the nearest 100, $w = 41600$
Complete the error interval for w . [2 marks]

$$\underline{41550} \leq w < \underline{41650}$$





13 When rounded to the nearest 20, $a = 360$
Complete the error interval for a .

[2 marks]

$$\underline{350} \leq a < \underline{370}$$

14 When rounded to 2 significant figures, $b = 27000$
Complete the error interval for b .

[2 marks]

$$\underline{26500} \leq b < \underline{27500}$$

15 When rounded to 1 significant figure, $g = 800$
Complete the error interval for g .

[2 marks]

$$\underline{750} \leq g < \underline{850}$$

16 When rounded to 3 significant figures, $C = 3.12$
Complete the error interval for C .

[2 marks]

$$\underline{3.115} \leq C < \underline{3.125}$$





17 When rounded to 2 significant figures, $H = 0.0068$
Complete the error interval for H . [2 marks]

$$\underline{0.00675} \leq H < \underline{0.00685}$$

18 The length of a football pitch is 94 m correct to the nearest metre.
Complete the error interval for the length of the football pitch. [2 marks]

$$\underline{93.5} \text{ m} \leq \text{length} < \underline{94.5} \text{ m}$$

19 The mass of an apple is 100 g correct to the nearest gram.
Complete the error interval for the mass of the apple. [2 marks]

$$\underline{99.5} \text{ g} \leq \text{mass} < \underline{100.5} \text{ g}$$

20 The capacity of a drinks can is 330 ml correct to the nearest millilitre.
Complete the error interval for the capacity of the drinks can. [2 marks]

$$\underline{329.5} \text{ ml} \leq \text{capacity} < \underline{330.5} \text{ ml}$$





21 When truncated to 1 digit, $R = 4$
Complete the error interval for R . [2 marks]

$$\underline{\quad 4 \quad} \leq R < \underline{\quad 5 \quad}$$

22 When truncated to 2 digits, $P = 36$
Complete the error interval for P . [2 marks]

$$\underline{\quad 36 \quad} \leq P < \underline{\quad 37 \quad}$$

23 When truncated to 1 decimal place, $Y = 8.7$
Complete the error interval for Y . [2 marks]

$$\underline{\quad 8.7 \quad} \leq Y < \underline{\quad 8.8 \quad}$$

24 When truncated to 2 decimal places, $U = 5.24$
Complete the error interval for U . [2 marks]

$$\underline{\quad 5.24 \quad} \leq U < \underline{\quad 5.25 \quad}$$





25 The number of students attending a school is 800, rounded to 1 significant figure.

25 (a) Write down the minimum possible number of students that attend the school. [1 mark]

Answer 750

25 (b) Write down the maximum possible number of students that attend the school. [1 mark]

Answer 849

26 Sam checks the amount of money in his pocket.
To the nearest pound, he has £4.00

26 (a) Write down the minimum amount of money Sam could have in his pocket. [1 mark]

Answer £ 3.50

26 (b) Write down the maximum amount of money Sam could have in his pocket. [1 mark]

Answer £ 4.49

