ERROR INTERVALS

Pearson Edexcel – Monday 8 June 2020 - Paper 3 (Calculator) Higher Tier

1.

3   A number, m, is rounded to 1 decimal place.
    The result is 9.4

    Complete the error interval for m.

    .... $\leqslant m <$ ....

    (Total for Question 3 is 2 marks)

Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Higher Tier

2.

6   Sally used her calculator to work out the value of a number y.

    The answer on her calculator display began

                            8.3

    Complete the error interval for y.

    .... $\leqslant y <$ ....

    (Total for Question 6 is 2 marks)

Pearson Edexcel - Thursday 8 November 2018 - Paper 2 (Calculator) Higher Tier

3.

9 Martin truncates the number N to 1 digit.
The result is 7

Write down the error interval for N.

....

(Total for Question 9 is 2 marks)

Pearson Edexcel - Wednesday 8 November 2017 - Paper 3 (Calculator) Higher Tier

4.

5 (a) Find the value of the reciprocal of 1.6
Give your answer as a decimal.

....

(1)

Jess rounds a number, x, to one decimal place.
The result is 9.8

(b) Write down the error interval for x.

....

(2)

(Total for Question 5 is 3 marks)

Pearson Edexcel - Thursday 8 June 2017 - Paper 2 (Calculator) Higher Tier

5.

7 A number, n, is rounded to 2 decimal places.
The result is 4.76

Using inequalities, write down the error interval for n.

....

(Total for Question 7 is 2 marks)

Pearson Edexcel - Specimen Papers Set 2 - Paper 3 (Calculator) Higher Tier

6.

4   Jim rounds a number, x, to one decimal place.
    The result is 7.2

    Write down the error interval for x.

....

(Total for Question 4 is 2 marks)

OCR GSCE – Tuesday 3 November 2020 – Paper 4 (Calculator) Higher Tier

7.

11 (a) The length, d, of Jamal's car is 4.72 m, correct to 2 decimal places.

Complete the error interval for the length, d.

(a) .... $\leqslant d <$ .... [2]

(b) Jamal travels 430 km, correct to the nearest 10 km.
His average speed is 57.3 km/h, correct to 1 decimal place.

Calculate the shortest possible time for Jamal's journey.
Give your answer correct to the nearest minute.

(b) .... hours .... minutes [5]

11 The area of a rectangle is $56\,m^2$, correct to the nearest m^2.
    The length of the rectangle is $9.2\,m$, correct to the nearest $0.1\,m$.

    Calculate the smallest possible width of the rectangle.

.... m [4]

9.

12 A log is 18m long, correct to the nearest metre.
It is to be cut into fence posts which must be 80cm long, correct to the nearest 10 centimetres.

What is the largest number of fence posts that can possibly be cut from this log?

.... [4]

10.

2 The length, *L*, of a steel rod is 8.3m, correct to 1 decimal place.

Complete the error interval for length *L*.

.... $\leqslant L <$ ....[2]

OCR GSCE – Sample Papers – Paper 5 (Non - Calculator) Higher Tier

11.

8   Safety rules on a campsite require Sarah to set up her barbecue at least 4 m from her tent.
    She decides to measure this distance using her stride length.
    Sarah knows that her stride length is 0.8 m, rounded to the nearest 0.1 m.

    Find the minimum number of strides Sarah will need to take to **guarantee** that her barbecue is a
    safe distance from her tent.

    .... **[3]**

AQA GSCE – Thursday 8 June 2020 – Paper 3 (Calculator) Higher Tier

12.

5   To the nearest 1000, there are 18 000 people at a festival.

5   (a)   Write down the minimum possible number of people at the festival.

        [1 mark]

            Answer _____

5   (b)   Write down the maximum possible number of people at the festival.

        [1 mark]

            Answer _____

13.

2 The height of a tree is 12 metres, correct to the nearest metre.

Circle the error interval.

[1 mark]

$11.5\,\text{m} \leqslant \text{height} < 12.5\,\text{m}$ $\qquad$ $11.5\,\text{m} \leqslant \text{height} \leqslant 12.5\,\text{m}$

$11.5\,\text{m} < \text{height} \leqslant 12.5\,\text{m}$ $\qquad$ $11.5\,\text{m} < \text{height} < 12.5\,\text{m}$

14.

17 $m = \dfrac{p - 2b}{2}$

$p = 68.3$ correct to 1 decimal place.

$b = 8.7$ correct to 1 decimal place.

Work out the lower bound for m.

[3 marks]

_____

_____

_____

_____

_____

Answer _____

AQA GSCE – Monday 12 November 2018 – Paper 3 (Calculator) Higher Tier

15.

5   The length of a table is 110 cm to the nearest cm

Complete the error interval.

[2 marks]

_____ cm ⩽ length < _____ cm

AQA GSCE – Thursday 7 June 2018 – Paper 2 (Calculator) Higher Tier

16.

9   The length of each side of a regular pentagon is 8.4 cm to 1 decimal place.

9 (a)   Complete the error interval for the length of one side.

[2 marks]

_____

_____ cm ⩽ length < _____ cm

9 (b)   Complete the error interval for the perimeter.

[1 mark]

_____

_____ cm ⩽ perimeter < _____ cm

17.

7 (a)   The length of a pipe is 6 metres to the nearest metre.

Complete the error interval for the length of the pipe.

[2 marks]

Answer _____ m ⩽ length < _____ m

7 (b)   The length of a different pipe is 4 metres to the nearest metre.
Olly says,

"The total length of the two pipes is 11 metres to the nearest metre."

Give an example to show that he could be correct.

[2 marks]

_____

_____