Rosary School \ Marj Elhamam

Name : …… Date: / 9 / 2025

Subject: Significant figures, powers and standard form Grade :8 ( )

(Past paper questions)

Q1.

(a) Work out

$$(9.75 \times 10^7) + (4.6 \times 10^6)$$

Give your answer in standard form.

.....

(2)

(b) A crate contains 1.4×10^6 drawing pins.

2.76×10^5 of the drawing pins are removed from the crate.
The rest of the drawing pins are then put into smaller boxes.
Each box contains 100 drawing pins.
How many boxes are filled?

.....

(3)

(Total for question = 5 marks)

(**QU31 LMA11/01, SAM 0**)

Q2.

(a) Which of these is the largest?

2.394×10^4 5.67×10^5 9.8×10^3

.....

(1)

(b) Work out

$1.2 \times 10^7 + 2.3 \times 10^6$

Give your answer in standard form.

.....

(2)

(Total for question = 3 marks)

(**QU20 LMA11/01, Oct 2022**)

Q3.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

What is the value of

$$4^3 + 25 \times 41 - \sqrt{64} \div 4$$

910.25 ☐ 1039 ☐ 1085 ☐ 1087 ☐

(Total for question = 1 mark)

(**QU10 LMA11/01, Oct 2022**)

Q4.

(a) Calculate

$$1.2 \times 10^{-4} \times 9.8 \times 10^{-3}$$

.....

(1)

(b) Write the numbers below in order, starting with the smallest.

0.21 0.123 0.023 0.03 0.3

....

smallest largest

(2)

(Total for question = 3 marks)

(**QU17 LMA11/01, Oct 2020**)

Q5.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Work out the value of

$$100 + \left(\sqrt{121} \times 4 - 13\right) - 7^2$$

−48	60	82	382
☐	☐	☐	☐

(Total for question = 1 mark)

(**QU09 LMA11/01, June 2022**)

Q6.

Work out

$$\frac{(4 \times 10^5) + (2 \times 10^6)}{(4.8 \times 10^{-3})}$$

Give your answer in standard form.

.....

(Total for question = 2 marks)

(**QU31 LMA11/01, Oct 2023**)

Q7.

Work out

$7.3 \times 10^4 + 2.9 \times 10^3$

Give your answer in standard form.

.....

(Total for question = 2 marks)

(**QU28 LMA11/01, June 2021**)

Q8.

(a) Calculate

$$140\,000 \times 58\,000$$

Give your answer in standard form.

.....

(1)

(b) Write these numbers in order of size.

Start with the smallest.

1.099 1.11 1.109 1.019 1.9

....

Smallest

(2)

(c) Calculate the value of

$$\frac{19^2 + \sqrt{(350 + 179)}}{7.5 \times (14.2 - 12.6)^2}$$

.....

(2)

(Total for question = 5 marks)

(**QU16 LMA11/01, June 2023**)

Q9.

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

What is 0.008947 written to 3 significant figures?

0.00895	0.008	0.009	0.00894
☒	☒	☒	☒

(Total for question = 1 mark)

(**QU06 LMA11/01, Oct 2022**)

Q10.

Work out $3.1 \times 10^3 + 2.4 \times 10^4$

Give your answer in standard form.

.....

(Total for question = 2 marks)

(**QU30 LMA11/01, Oct 2021**)

Q11.

(a) Work out

$$2.39 \times 10^6 - 7.4 \times 10^5$$

.....

(1)

(b) Write the numbers below in order, starting with the smallest.

99 999 8×10^5 175 000 5.2×10^4

....

Smallest

(2)

(Total for question = 3 marks)

(**QU23 LMA11/01, June 2022**)

Q12.

(a) Write down the value of the following

(i) 15°

.....

(1)

(ii) 10^{-2}

.....

(1)

(b) Write 453.8×10^4 in standard form.

.....

(1)

A container holds 1.8×10^5 plastic cups.
Each cup weighs 1.2×10^{-2} kilograms.

(c) What is the total weight of all the cups?

Give your answer in standard form.

..... kilograms

(2)

(Total for question = 5 marks)

(**QU28 LMA11/01, June 2019**)

Q13.

Answer the question with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Which single power of 7 is equal to

$(7^8)^4$

7^2	7^4	7^{12}	7^{32}
☒	☒	☒	☒

(Total for Question is 1 mark)

(**Q09 LMA11/01, June 2024**)

Q14.

Answer the question with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Calculate

$$5^3 - \sqrt{1369} + 8 \times (9 + 12 \div 3)$$

144	192	672	1248
☒	☒	☒	☒

(Total for Question is 1 mark)

(**Q10 LMA11/01, June 2024**)