EXAM PAPERS PRACTICE

GCSE OCR Math J560

Standard form

Question Paper

"We will help you to achieve A Star "

Question 1

Work out the value of $(7.5 \times 10^4) \times (2.5 \times 10^3)$
Give your answer in standard form.

[2 marks]

Question 2

The table shows some information about eight planets.

Planet	Distance from Earth (km)	Mass (kg)
Earth	0	5.97×10^{24}
Jupiter	6.29×10^8	1.898×10^{27}
Mars	7.83×10^7	6.42×10^{23}
Mercury	9.17×10^7	3.302×10^{23}
Neptune	4.35×10^9	1.024×10^{26}
Saturn	1.28×10^9	5.68×10^{26}
Uranus	2.72×10^9	8.683×10^{25}
Venus	4.14×10^7	4.869×10^{24}

(a) Write down the name of the planet with the greatest mass.

[1 mark]

Question 3

Nishat says that Neptune is over a hundred times further away from Earth than Venus is.

(c) Is Nishat right?
    You must show how you get your answer.

[2 marks]

Question 4

(b) Find the difference between the mass of Venus and the mass of Mercury.

[1 mark]

Question 5

Work out the value of $(3 \times 10^7) \times (9 \times 10^6)$
Give your answer in standard form.

[2 marks]

Question 6

Work out $(13.8 \times 10^7) \times (5.4 \times 10^{-12})$
Give your answer as an ordinary number.

[2 marks]

Question 7

Write 0.000068 in standard form.

[1 mark]

Question 8

Work out the value of $(9 \times 10^{-4}) \times (3 \times 10^{7})$
Give your answer in standard form.

[2 marks]

Question 9

(b) Work out the value of $(2.52 \times 10^{5}) \div (4 \times 10^{-3})$
Give your answer in standard form.

[2 marks]

Question 10

(a) Write 7.97×10^{-6} as an ordinary number.

[1 mark]

Question 11

(b) Write 4.5×10^4 as an ordinary number.

[1 mark]

Question 12

(a) Write 0.000423 in standard form.

[1 mark]

Question 13

(a) Write 7.8×10^{-4} as an ordinary number.

[1 mark]

Question 14

The mass of the Sun is 2×10^{30} kg.
The mass of the largest known star is 315 times the mass of the Sun.

(c) Work out the mass of this star.
     Give your answer in kg in standard form.

[2 marks]

Question 15

Write 6.7×10^{-5} as an ordinary number.

[1 mark]