

N1

Number exam review

1 The table shows the populations of five countries.

Country	Population
The Gambia	1.4×10^6
Kenya	3.2×10^7
Mali	1.2×10^7
Nigeria	1.4×10^8
Swaziland	1.2×10^6

a Which of these countries has the largest population?

.....
(1)

b Calculate the difference between the population of Kenya and the population of Nigeria.
Give your answer in standard form.

.....
(2)

c The population of South Africa is 30 times the population of The Gambia.
Calculate the population of South Africa.
Give your answer in standard form.

.....
(1)

(Total 4 marks)

2 a Find the Highest Common Factor of 75 and 105.

.....
(2)

b Find the Lowest Common Multiple of 75 and 105.

.....
(2)

(Total 4 marks)

3 Write as ordinary numbers

i 3.6×10^5

.....

ii 2.9×10^{-3}

.....

(Total 2 marks)

4 Write 140 as the product of its prime factors.

.....

(Total 2 marks)

5 p is a prime number not equal to 7

a Write down the Highest Common Factor (HCF) of

$$49p \quad \text{and} \quad 7p^2$$

.....
(1)

x and y are different prime numbers.

b i Write down the Highest Common Factor (HCF) of the two expressions

$$x^2y \quad xy^2$$

.....

ii Write down the Lowest Common Multiple (LCM) of the two expressions

$$x^2y \quad xy^2$$

.....
(3)

(Total 4 marks)

6

$$y^2 = \frac{ab}{a+b}$$

$$a = 3 \times 10^8$$

$$b = 2 \times 10^7$$

Find y .

Give your answer in standard form correct to 2 significant figures.

$y =$

(Total 3 marks)

7 a Write 5 720 000 in standard form.

.....
(1)

$$p = 5\,720\,000$$

$$q = 4.5 \times 10^5$$

b Find the value of $\frac{p-q}{(p+q)^2}$

Give your answer in standard form, correct to 2 significant figures.

.....
(2)

(Total 3 marks)



8 a Write 0.000 000 000 054 in standard form.

.....
(1)

$$S = 12.6 R^2$$

$$R = 0.000\ 000\ 000\ 054$$

b Use the formula to calculate the value of S.
Give your answer in standard form, correct to 3 significant figures.

S =
(2)

(Total 3 marks)