Numbers – 2020 O Level Math D

1. Nov/2020/Paper_11/No.4

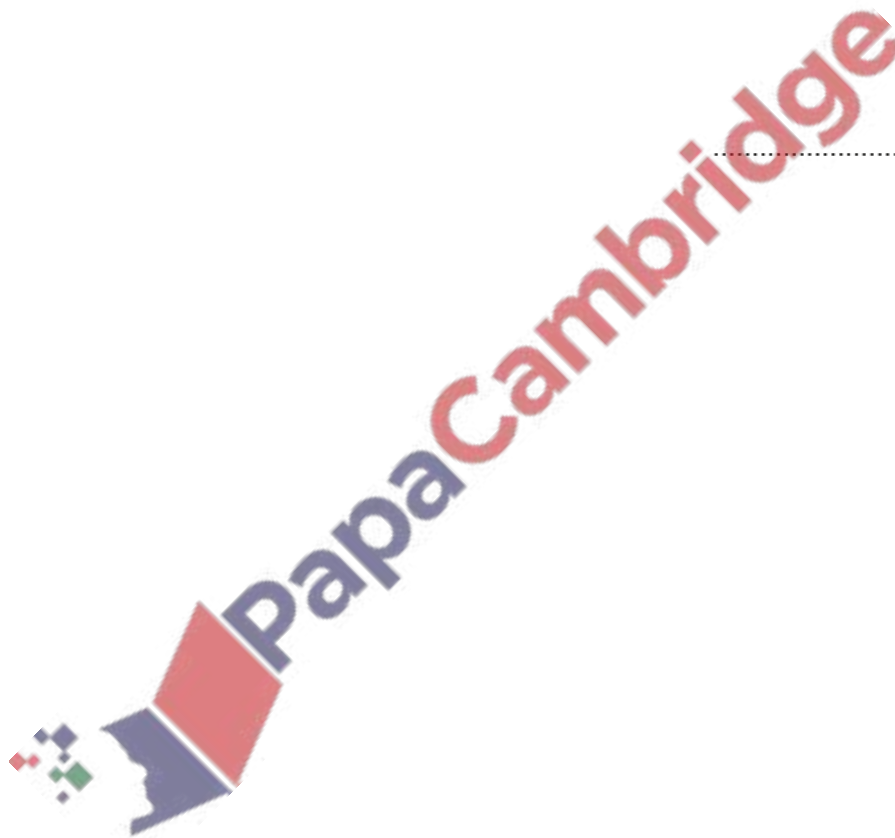   **(a)** Write the number 3456.789 correct to the nearest 100.

        .... [1]

    (b) Evaluate $\sqrt{160000}$.

        .... [1]

    (c) Evaluate $1 - 3^{-1}$.

        .... [1]

(a) Express 99 as the product of prime factors.

.... [1]

(b) Expressed as the product of prime factors,

$$p = 2^{n+2} \times 3^n \times 5 \quad \text{and} \quad q = 2^n \times 3^{n+1} \times 5^2$$
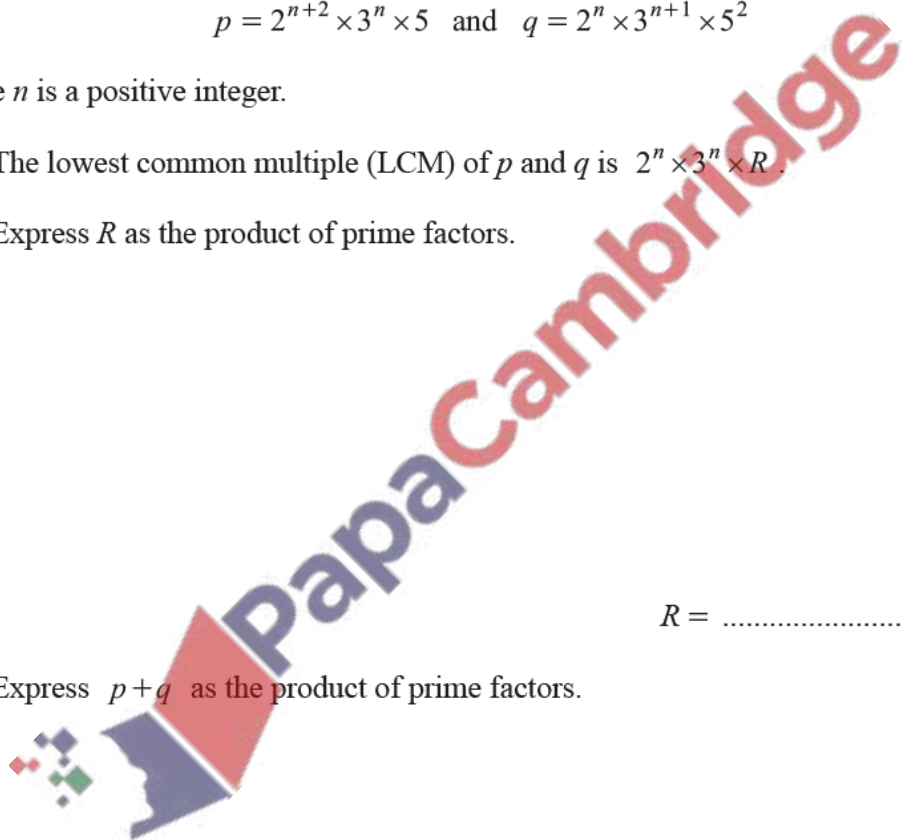
where n is a positive integer.

(i) The lowest common multiple (LCM) of p and q is $2^n \times 3^n \times R$.

Express R as the product of prime factors.

$R =$ .... [2]

(ii) Express $p + q$ as the product of prime factors.

.... [2]

2

3.

    (a) Write $\dfrac{23}{5}$ as a mixed number.

.... [1]

    (b) Work out $\dfrac{3}{8} \div 6$.

.... [1]
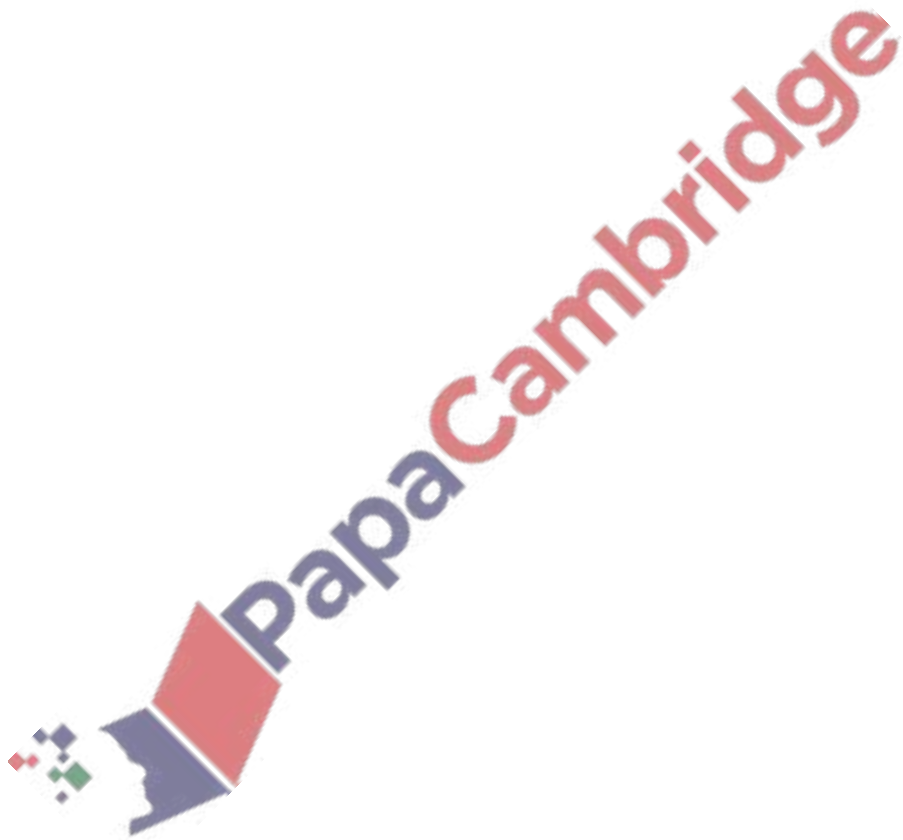
Safoora is buying some apples, bananas and peaches.
She can buy
- packs of 6 apples
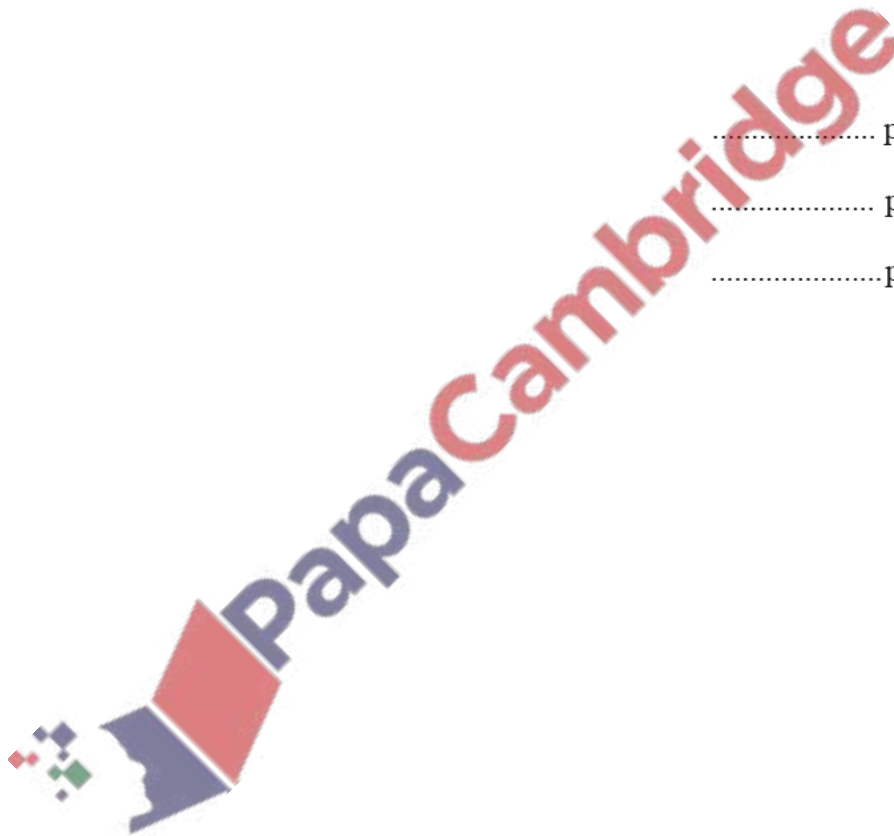- packs of 5 bananas
- packs of 12 peaches.

She needs to buy the **same** number of each fruit.

Calculate the smallest number of packs of apples, bananas and peaches that she needs to buy.

.... packs of apples

.... packs of bananas

.....................packs of peaches [2]

5.

(a) Write 108 as the product of its prime factors.

.... [2]

(b) Find the lowest common multiple (LCM) of 108 and 180.

.... [2]