6. [Numbers] [1996–2000]

Method

Approach I – ordering   ☒

Given: 0.8, 0.72, 0.098 and 0.605

∴ Arranging the numbers according to its decreasing value,

Deduce that

0.8 > 0.72 > 0.605 > 0.098

∴ **The largest number is**

0.8 **(ans)**

Approach II – place holder

Given: 0.8, 0.72, 0.098 and 0.605

∴ Pad the trailing zeros after the decimal point (the padded zeros would not affect the value of the number). Place the numbers vertically according to its place holders.
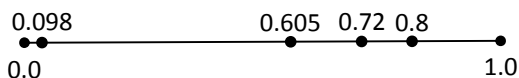
$$
\begin{array}{l}
0.8 \equiv 0.800 \\
0.72 \equiv 0.720 \\
0.098 \equiv 0.098 \\
0.605 \equiv 0.605
\end{array}
$$

∴ **The largest number is**

0.8 **(ans)**

Approach III – number line

Given: 0.8, 0.72, 0.098 and 0.605

∴ Draw the number line:

∴ **The largest number is**

0.8 **(ans)**

☒ 0.72

☒ 0.098

☒ 0.605

☑ 0.8

(1) (ans)

☺ **CheckBack**

Apart from carelessness, this question is easily checked **by arranging it vertically**.

$$
\begin{array}{l}
0.8 \equiv 0.800 \\
0.72 \equiv 0.720 \\
0.605 \equiv 0.605 \\
0.098 \equiv 0.098
\end{array}
$$

(checked)

☺ **Exam Report**

Majority of the candidates gave the correct answer.

                                                              ✄

7. [Numbers] [1996–2000]

Method

Approach I – numbers

In a pizza restaurant, 2 boys share 3 pizzas equally.

∴ Let S be the share of the pizzas each boy will get.

∴ **The share of the pizzas each boy will get**

$$S = 3 \text{ pizzas} \div 2 \text{ boys}$$

$$= \frac{3}{2}$$

$$= \frac{2+1}{2}$$

$$= \frac{2}{2} + \frac{1}{2}$$

$$= 1 + \frac{1}{2}$$

$$= 1\tfrac{1}{2} \text{ pizzas} \quad \textbf{(ans)}$$

Approach II – ratio

In a pizza restaurant, 2 boys share 3 pizzas equally.

$\therefore$ Let S be the share of the pizzas each boy will get.

$\Rightarrow$ 2 boys $\equiv$ 3 pizzas   ($\div 2$ for both sides)

2 boys $\div 2 \equiv 3$ pizza $\div 2$

$$\frac{2}{2} \text{ boy} \equiv \frac{3}{2}$$

$$1 \text{ boy} \equiv \frac{2+1}{2}$$

$$= \frac{2}{2} + \frac{1}{2}$$

$$= 1 + \frac{1}{2}$$

$$= 1\tfrac{1}{2} \text{ pizzas} \quad \textbf{(ans)}$$

$\therefore$ **The share of the pizzas each boy will get**

$S = 1\tfrac{1}{2}$ pizzas **(ans)**

Approach III – model

In a pizza restaurant, 2 boys share 3 pizzas equally.

$\therefore$ Let S be the share of the pizzas each boy will get.

The model based on the information given is drawn as shown.
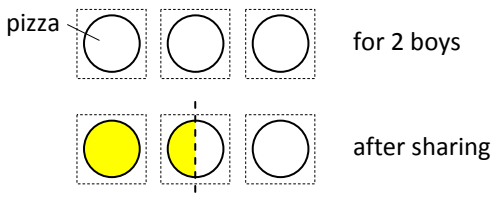
$\therefore$ **The share of the pizzas each boy will get**

$S = 1\tfrac{1}{2}$ pizzas **(ans)**

☒ 1 pizza

☒ $\dfrac{2}{3}$ pizza

☒ $1\tfrac{2}{3}$ pizzas

☑ $1\tfrac{1}{2}$ pizzas

(3) (ans)

☺ **CheckBack**

If the answer is $1\tfrac{1}{2}$ pizzas,

- The total pizzas for the two boys
$$= 1\tfrac{1}{2} + 1\tfrac{1}{2}$$
$$= 1 + \tfrac{1}{2} + 1 + \tfrac{1}{2} = 2 + \tfrac{1}{2} + \tfrac{1}{2}$$
$$= 3 \text{ pizzas} \quad \textbf{(checked)}$$

☺ **Exam Report**

Quite a number of candidates gave the correct option for this question.

End of 1996–2000