

1. Evaluate

(3mks)

$$\frac{-12 \div (-3) \times 4 - (-15)}{-5 \times 6 \div 2 + (-5)}$$

$$\begin{aligned} N \Rightarrow -12 \div (-3) \times 4 - (-15) \\ = (4 \times 4) - (-15) \quad M_1 \\ = 16 + 15 = 31 \end{aligned}$$

$$\begin{aligned} D \Rightarrow -5 \times 6 \div 2 + (-5) \quad M_1 \\ = -5 \times 3 + (-5) = -20 \end{aligned}$$

$$A_1 \quad \left| \begin{aligned} &= \frac{31}{-20} = -1 \frac{11}{20} \end{aligned} \right.$$

2. Convert the recurring decimal $12.\dot{1}8$ into a fraction.

(3mks)

$$\begin{aligned} n &= 12.1818 \dots \quad M_1 \\ 100n &= 1218.1818 \dots \\ \hline 99n &= 1206 \end{aligned}$$

$$\begin{aligned} n &= \frac{1206}{99} = \frac{134}{11} \quad M_1 \\ &= 12 \frac{2}{11} \quad A_1 \end{aligned}$$

3. The G.C.D of two numbers is 12 and their L.C.M is 240. If one of the numbers is 60. Find the other number.

(3mks)

$$\begin{aligned} 12 \times 240 \\ \hline 60 \\ = 48 \end{aligned}$$