

Assessment Preparation 2 : Answers

1) factorise

$$a) \begin{aligned} 2x+4 \\ = 2(x+2) \end{aligned}$$

$$b) \begin{aligned} 6x-9 \\ = 3(2x-3) \end{aligned}$$

$$c) \begin{aligned} 8a+6 \\ = 2(4a+3) \end{aligned}$$

$$2) \quad a) \begin{aligned} x+4 &= 7 \\ x &= 7-4 \\ x &= 3 \end{aligned}$$

$$b) \begin{aligned} x-2 &= 8 \\ x &= 8+2 \\ x &= 10 \end{aligned}$$

$$c) \begin{aligned} 2x &= 10 \\ x &= \frac{10}{2} \\ x &= 5 \end{aligned}$$

$$d) \begin{aligned} \frac{x}{3} &= 4 \\ x &= 4 \times 3 \\ x &= 12 \end{aligned}$$

$$e) \begin{aligned} 5q+4 &= 3q+10 \\ 5q-3q &= 10-4 \\ 2q &= 6 \\ q &= \frac{6}{2} \\ q &= 3 \end{aligned}$$

$$f) \begin{aligned} 3y-2 &= 8y-6 \\ -2+6 &= 8y-3y \\ 4 &= 5y \\ \frac{4}{5} &= y \end{aligned}$$

$$3) \quad a) \begin{aligned} \frac{297 \times 21}{28} \\ \approx \frac{300 \times 20}{30} \\ \approx \frac{6000}{30} \\ \approx 200 \end{aligned}$$

$$b) \begin{aligned} \sqrt{34} \times 1.9^2 \\ \approx \sqrt{36} \times 2^2 \\ \approx 6 \times 4 \\ \approx 24 \end{aligned}$$

$$c) \begin{aligned} 19 \times 0.21 \\ \approx 20 \times 0.2 \\ \approx 2 \times 2 \\ \approx 4 \end{aligned}$$

$$d) \begin{aligned} \frac{504 \times 42}{0.39} \\ \approx \frac{500 \times 40}{0.4} & \approx \frac{20\,000}{0.4} \\ & \approx \frac{200\,000}{4} \\ & \approx 50\,000 \end{aligned}$$

$$4) \quad \frac{1}{4} \times \boxed{} = \frac{1}{12}$$

ANSWER = $\frac{1}{3}$

$$5) \quad 0.4 \times \boxed{} = 0.24$$

ANSWER = 0.6