

Solving Equations Exam Practice



Q1. Solve the equation $2x + 5 = 19$

Answer: _____
(2 marks)

Q2. Solve the equation $4x - 7 = 55$

Answer: _____
(2 marks)

Q3. Solve the equation $2(x + 9) = 40$

Answer: _____
(2 marks)



Q4. Solve the equation $8x - 5 = 5x + 37$

Answer: _____
(2 marks)

Q5. Solve the equation $35 - 4b = 11b + 5$

Answer: _____
(2 marks)



Q6. Solve the equation $4(x - 8) = 6(x + 5)$

Answer: _____
(2 marks)

Q7. Solve the equation $4(2a + 3) = 3(2a + 8)$

Answer: _____
(3 marks)



Q8. Solve the equation $4(x - 8) = 6(x + 5)$

Answer: _____
(3 marks)

Q9. Solve the equation $155 - 4w = 27$

Answer: _____
(2 marks)



Q10. Solve the equation $7x + 10\pi = 5x - 2\pi$, giving your answer in terms of π .

Answer: _____
(2 marks)

Q11. You are given that $146 \times 823 = 120158$. Use this fact to solve the equations:

(i) $146x = 120158$

Answer: _____
(2 marks)

(ii) $292x = 120158$

Answer: _____
(2 marks)



Q12. Solve the equation for x : $25 - x = 3x + 12 - 5x$

Answer: _____
(2 marks)

Q13. Rory is asked to solve the equation, $3x - 6 = x + 11$.

His solution is as follows:

$$\begin{aligned}4x - 6 &= x + 11 \\-6 &= -3x + 11 \\17 &= -3x \\-\frac{17}{3} &= x \\x &= -5.6\end{aligned}$$

(i) Identify the mistakes in his solution

Answer: _____
(2 marks)

(ii) Write out a correct solution

Answer: _____
(2 marks)



Fractional Equations:

Q14. Solve the equation $8 + \frac{1}{2}x = 22$

Answer: _____
(2 marks)

Q15. Solve the equation $\frac{x-9}{5} = 7$

Answer: _____
(2 marks)

Q16. Solve the equation $3x + \frac{1}{2}x + 4 = 25$

Answer: _____
(2 marks)



Q17. Solve the equation $\frac{12-3x}{2} + 11 = 20$

Answer: _____
(3 marks)

Q18. Solve the equation $\frac{y-9}{y} = 13$

Answer: _____
(2 marks)

Q19. Solve the equation $\frac{1}{3}x + \frac{1}{2}x - 2 = 13$

Answer: _____
(3 marks)