

Name: _____

Exam Style Questions

Solving Equations: Fractional (advanced)



Equipment needed: Pen, Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 111a



Answers and Video Solutions



1. Solve



$$\frac{2}{x} + \frac{2}{x+3} = 1$$

.....
(5)

2. Solve



$$\frac{1}{x+3} + \frac{6}{x+7} = 1$$

.....
(5)

3. Solve



$$\frac{1}{x+3} + \frac{3}{1-x} = 2$$

.....
(5)

4. Solve



$$\frac{7}{x} - \frac{2}{x+2} = 3$$

.....
(5)

5. Solve



$$\frac{7}{x+2} + \frac{10}{2x-5} = 3$$

.....
(5)

6. Solve, giving your answers to 1 decimal place.



$$\frac{1}{2x+1} + \frac{4}{x-2} = 1$$

.....
(6)

7. Solve, giving your answers to 2 decimal places.



$$\frac{5}{x+1} + \frac{3}{x+4} = \frac{2}{3}$$

.....
(6)

8. Solve



$$\frac{1}{x+1} + \frac{2}{x} = 5$$

Give your answer in the form $\frac{p \pm \sqrt{q}}{5}$ where p and q are integers.

.....
(6)

9. Solve



$$\frac{9}{4x - 1} = \frac{4}{7} + \frac{3}{x + 2}$$

.....
(6)

10. Solve, giving your answers to 1 decimal place.



$$\frac{x}{1 + 4x} + \frac{3}{x - 1} = 2$$

11. Solve, giving your answers to 1 decimal place.



$$\frac{2x - 1}{x} - \frac{4}{x + 2} = 5$$

.....
(6)

12. Solve, giving your answers to 2 decimal places.



$$\frac{x - 4}{x + 5} - \frac{3x - 2}{x + 1} = 1$$