

Solve. Be sure to check all your solutions for extraneous solutions.

1. $\frac{3x}{8} + \frac{1}{2} = \frac{x}{4} + 2$

2. $\frac{x}{6} + \frac{3}{2} = \frac{2x}{3} - 1$

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

4. $\frac{7x}{5} + \frac{5}{2} = \frac{x}{10} + \frac{1}{5}$

5. $\frac{5}{8x} - \frac{1}{2} = \frac{7}{6x}$

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

7. $\frac{1}{6} + \frac{1}{y} = \frac{1}{3}$

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

9. $x - 7 + \frac{14}{x} = 2$

10. $\frac{x}{2} + \frac{12}{x} = 5$

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

12. $\frac{7}{x+1} = \frac{6}{x-5}$

13. $\frac{4}{x^2-5x-36} = \frac{-1}{x+4}$

14. $\frac{x-2}{3x+5} = \frac{6}{x-3}$

15. $\frac{x}{x+4} = \frac{2}{x}$

16. $\frac{x-1}{7x+6} = \frac{2}{x+2}$

17. $\frac{3}{2x-9} - 2 = \frac{5x}{2x-9}$

18. $\frac{3}{x-3} - 4 = \frac{x}{x-3}$

19. $\frac{x}{x-2} = 3 - \frac{2}{x-2}$

20. $\frac{3x}{x+9} + 1 = \frac{x}{x+9}$

21. $3 - \frac{2}{4x-1} = \frac{3x}{4x-1}$

22. $5 - \frac{3}{2x-1} = \frac{x-4}{2x-1}$

23. $8 + \frac{6}{x-5} = \frac{x-13}{x-5}$

24. $1 + \frac{x}{2-x} = \frac{6x}{2-x}$

25. $x + \frac{x+5}{x-7} = \frac{10x-58}{x-7}$

26. $1 - \frac{13}{x} + \frac{36}{x^2} = 0$

27. $\frac{3}{x+1} - \frac{1}{x+4} = \frac{x+12}{x^2+5x+4}$

28. $\frac{6}{x+2} + \frac{5}{x-2} = \frac{20}{x^2-4}$

29. $\frac{7}{x+5} + \frac{3}{x-5} = \frac{30}{x^2-25}$

30. $\frac{3}{x+4} - \frac{1}{x+3} = \frac{x+9}{x^2+7x+12}$

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15

16	17	18
19	20	21
22	23	24
25	26	27
28	29	30