

Solve each equation. State any extraneous solutions.

$$11. \frac{4}{a} = \frac{3}{a-2}$$

$$12. \frac{3}{x} = \frac{1}{x-2}$$

$$13. \frac{x-3}{x} = \frac{x-3}{x-6}$$

$$14. \frac{x}{x+1} = \frac{x-6}{x-1}$$

$$15. \frac{2n}{3} + \frac{1}{2} = \frac{2n-3}{6}$$

$$16. \frac{5}{4} + \frac{3y}{2} = \frac{7y}{6}$$

$$17. \frac{a-1}{a+1} - \frac{2a}{a-1} = -1$$

$$18. \frac{7}{x^2-5x} + \frac{3}{5-x} = \frac{4}{x}$$

$$19. \frac{4x}{2x+3} - \frac{2x}{2x-3} = 1$$

$$20. \frac{5}{5-p} - \frac{p^2}{p-5} = -8$$

$$21. \frac{a}{3a+6} - \frac{a}{5a+10} = \frac{2}{5}$$

$$22. \frac{c}{c-4} - \frac{6}{4-c} = c$$

$$23. \frac{2b-5}{b-2} - 2 = \frac{3}{b+2}$$

$$24. \frac{7}{k-3} - \frac{1}{2} = \frac{3}{k-4}$$

$$25. \frac{x^2-4}{x-2} + x^2 = 4$$

$$26. \frac{2n}{n-1} + \frac{n-5}{n^2-1} = 1$$

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

$$28. \frac{4}{m^2-8m+12} = \frac{m}{m-2} + \frac{1}{m-6}$$