

5-7 Practice 1

Solve each equation. State the excluded values and any extraneous solutions.

1) $\frac{1}{n} = \frac{n-1}{2n} + \frac{1}{2n}$

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

3) $\frac{m-1}{2m} - 3 = \frac{m-4}{2m}$

4) $2 + \frac{2}{5a} = \frac{a-3}{a}$

$$5) \frac{1}{m} = \frac{m+1}{m^2-m} - \frac{5}{m}$$

$$6) \frac{1}{p^2-36} - \frac{1}{p+6} = \frac{1}{p-6}$$

$$7) 1 = \frac{k+5}{3k} + \frac{1}{3k}$$

$$8) \frac{1}{n-3} - \frac{3}{n-3} = \frac{1}{n+5}$$

$$9) \frac{3v+18}{v^2} = \frac{1}{2} + \frac{v+5}{2v}$$

$$10) \frac{n^2+n-12}{n^2} - \frac{n^2-36}{n^2} = \frac{3}{n}$$