Name: _____

Solve each equation. Remember to check for extraneous solutions.

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

2) $1 = \frac{3r+3}{2r} + \frac{4r-12}{r}$

3) $\frac{4}{a} = \frac{a-4}{a} - \frac{1}{a}$

4) $\frac{1}{p} - \frac{3p+4}{p^2} = \frac{p+2}{p^2}$

5) $\frac{1}{4p} = \frac{1}{p^2} + \frac{1}{2p}$

6) $\frac{4p-1}{6p^2} - \frac{5}{6p^2} = \frac{p+5}{3p^2}$

7) $\frac{a-3}{5a^2} + \frac{1}{5a^2} = \frac{1}{a}$

8) $\frac{4k-20}{3k^2} = \frac{1}{3k} + \frac{1}{3k^2}$

9) $1 = \frac{7v+49}{8v+1} - \frac{1}{8v+1}$

10) $\frac{4}{5k+3} = \frac{1}{4} - \frac{1}{20k+12}$

11) $\frac{4}{n^2+8n} = \frac{1}{n^2+8n} + \frac{1}{n}$

12) $\frac{k-3}{4k+8} = 1 + \frac{k-1}{k+2}$

13) $\frac{6n+30}{n^2-7n} + 1 = \frac{n^2-36}{n^2-7n}$

14) $\frac{8}{a} = \frac{7a^2-35a-98}{a^2+3a} + \frac{8}{a^2+3a}$

15) $\frac{v-6}{v} + \frac{1}{v+7} = \frac{v+3}{v+7}$

16) $\frac{8}{5v} = \frac{v+4}{5v} + v - 4$