

11. 8 #2 rational expressions

Date_____ Period____

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Solve each equation. Remember to check for extraneous solutions.

1)
$$\frac{16n - 12}{5n} = \frac{1}{5n} + 4$$

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

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

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

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

$$6) \frac{3}{x-6} = \frac{1}{x-6} - 3$$

$$7) \frac{2}{3} = \frac{2}{3a+18} + \frac{1}{3}$$

$$8) \frac{2}{x-5} = \frac{1}{x^2-5x} + \frac{1}{x-5}$$

Answers to 11. 8 #2 rational expressions

1) $\left\{-\frac{13}{4}\right\}$

2) $\{-11\}$

3) $\{5\}$

4) $\{4\}$

5) $\left\{-\frac{3}{4}\right\}$

6) $\left\{\frac{16}{3}\right\}$

7) $\{-4\}$

8) $\{1\}$