

Name: _____

Date: _____

Learning Goal 6.2

Solving equations, identifying any non-permissible values and extraneous roots.

Assignment

Solve the following rational equations. State any non – permissible values and/or extraneous roots.

a.
$$\frac{1}{6k^2} = \frac{1}{3k^2} - \frac{1}{k}$$

b.
$$\frac{1}{n^2} + \frac{1}{n} = \frac{1}{2n^2}$$

c.
$$\frac{1}{6b^2} + \frac{1}{6b} = \frac{1}{b^2}$$

d.
$$\frac{b+6}{4b^2} + \frac{3}{2b^2} = \frac{b+4}{2b^2}$$

e.
$$\frac{1}{x} = \frac{6}{5x} + 1$$

f.
$$\frac{1}{6x^2} = \frac{1}{2x} + \frac{7}{6x^2}$$

g.
$$\frac{3}{m^2} = \frac{m-4}{3m^2} + \frac{2}{3m^2}$$

h.
$$\frac{1}{n} = \frac{1}{5n} - \frac{n-1}{5n}$$