

Solving Equations 1.0

Name _____

1. Solve the following equations:

a) $\frac{x^2-10x}{3} = -9$

b) $\sqrt[3]{x-8} = \frac{3}{2}$

c) $\frac{t}{t+4} + \frac{4}{t+4} + 2 = 0$

d) $\frac{4}{u-1} + \frac{6}{3u+1} = \frac{15}{3u+1}$

e) $(u-1)(2u^2+3u-1) = (2u+3)(u^2-1)$

f) $\sqrt{3x+2} = x$

g) $\sqrt{3x+2} = x-1$

h) $\sqrt{3x} + 2 = x$

2. Simplify:

a) $\frac{x^2-10x}{x(x+2)}$

b) $\frac{2x^2-10x}{x(4x+2)}$

c) $\frac{x}{2} + \frac{5}{6} + \frac{x}{3} + \frac{3}{2}$

d) $\frac{t}{t+4} + \frac{4}{t+4} + 2$

Homework

1. Solve the following equations:

a) $\frac{x^2-10x}{x} = -9$

b) $\sqrt{3x-2} = \frac{4}{3}$

c) $\frac{(t+4)^2}{2(t+4)(t+2)} = 2$

d) $\frac{4+u}{(u-1)+(3u+1)} = \frac{15}{3u+1}$

e) $\frac{u}{7}(2u^2 + 3u - 1) = (\frac{2u+3}{7})(u^2 - u)$

f) $\sqrt{3x-2} = x$

g) $2 - \sqrt{x+2} = x$

h) $\sqrt{x} + 2 = 2x$

2. Simplify:

a) $\frac{x}{5} + \frac{5}{6} + \frac{4}{5} + \frac{x}{2}$

b) $\frac{2x^2-10x}{x(4x+2)}$

c) $\frac{(x+2)^2+x}{x+2}$

d) $\frac{t}{t+4} + \frac{4}{t-1} + 2$