Rational Equations

Name: _____ Date: ____ Score: ____

Direction: Solve each rational equation. Check your answers for extraneous solutions. Show all your work in the space provided.

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

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

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

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

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

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

$$x = 1$$

$$x = 4$$

$$3) \quad \frac{x+4}{x-3} = \frac{x-2}{x+3}$$

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

$$x = -\frac{1}{2}$$

$$x_1 = -1$$
, $x_2 = 4$