

Name: _____

Points: _____

Solving Rational Equations

a. $\frac{2x}{2x-1} + \frac{1}{x} = \frac{1}{2x-1}$

b. $\frac{3}{2x+3} - \frac{1}{2x-3} = \frac{4}{4x^2-9}$

c. $3 - \frac{5}{x} - \frac{2}{x^2} = 0$

d. $\frac{2}{x-5} + \frac{1}{2x} = \frac{5}{3x^2-15x}$

Simplify Radicals

1. Simplify

a. $\sqrt{x^2}$
c. $\sqrt{x^4}$
e. $\sqrt{x^6}$
g. $\sqrt{x^{98}}$

b. $\sqrt{x^3}$
d. $\sqrt{x^5}$
f. $\sqrt{x^7}$
h. $\sqrt{x^{99}}$

2. Simplify a. $\sqrt{21x^6y^3}$

b. $\sqrt{\frac{128y^{10}}{225x^6}}$

c. $(-\sqrt{6x^6y^5}) \cdot (\sqrt{8x^3y^5})$

3. Add or subtract

a. $2\sqrt{50} - 6\sqrt{125} + \sqrt{98} + 3\sqrt{80}$

b. $\sqrt{4x^7y^5} + 9x^2y^2\sqrt{x^3y} - 5xy\sqrt{x^5y^3}$