

Rational Equations #1 Math 9 sheet name: _____

1) Deliver a present or 'Blast' the following and then solve for x

a) $\frac{3x}{5} + \frac{1}{2} = \frac{7}{10}$

$x = \frac{1}{3}$

b) $\frac{5x}{4} + \frac{7}{12} = \frac{5}{3}$

$x = \frac{13}{15}$

c) $\frac{5x}{18} - \frac{4}{3} = \frac{1}{6}$

$x = \frac{27}{5}$

d) $\frac{9x}{3} + 7 = \frac{7}{9}$

$x = -\frac{56}{27}$

e) $\frac{-2x}{3} - \frac{5}{12} = 12$

$x = -\frac{149}{8}$

f) $\frac{7x}{11} - \frac{5}{33} = 2$

$x = \frac{7}{21}$

g) $\frac{9x}{5} - \frac{1x}{2} = \frac{3}{10}$

$x = \frac{3}{13}$

h) $\frac{7x}{4} + \frac{7x}{2} = 12$

$x = \frac{16}{7}$

i) $6 - \frac{4x}{3} = \frac{3}{7}$

$x = \frac{117}{28}$

$$j) \quad 3x - \frac{1}{9} = \frac{3}{4}$$

$$x = \frac{31}{108}$$

$$k) \quad \frac{7x}{4} - 7 = \frac{9}{10}$$

$$x = \frac{158}{35}$$

$$l) \quad \frac{5x}{3} - \frac{6}{7} = 11$$

$$x = \frac{249}{35}$$

$$m) \quad -x + \frac{4}{9} = \frac{1}{18}$$

$$x = \frac{7}{18}$$

$$n) \quad \frac{x}{2} - \frac{3x}{4} = \frac{3}{4} + 1$$

$$x = -7$$

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

$$x = -20$$

$$p) \quad \frac{5x}{2} - \frac{4x}{3} = \frac{-7}{6}$$

$$x = -1$$

$$q) \quad \frac{x}{3} - \frac{x}{5} + 2 = 4$$

$$x = 15$$

$$r) \quad \frac{x}{3} - \frac{3x}{2} + x = \frac{1}{6}$$

$$x = -1$$

Extend your skills and strive for excellence!up for a challenge??

Solve: a) $\frac{4(2x-1)}{7} + 3 = \frac{1}{14}$

$$x = \frac{-33}{16}$$

b) $\frac{3(2x-7)}{2} + \frac{4(x+8)}{5} = \frac{3}{10}$

$$x = \frac{22}{19}$$