



Rational Equations

Solve.

$$1) x + \frac{x}{2} + \frac{x}{3} = 11$$

$$2) \frac{x}{5} + \frac{x}{4} + \frac{x}{3} = \frac{x}{2} + 17$$

$$3) 2x - \frac{x+3}{3} + 15 = \frac{2x+26}{5}$$

$$4) \frac{x-2}{2} + \frac{x}{3} = 20 - \frac{x-6}{2}$$

$$5) \frac{3x-3}{4} - \frac{3x-4}{3} = \frac{16}{3} - \frac{27+4x}{9}$$

$$6) \frac{3a+x}{x} - 5 = \frac{6}{x}$$

$$7) \frac{9x+20}{36} = \frac{4x-12}{5x-4} + \frac{x}{4}$$

$$8) 4x - 20 = \frac{3x}{7} + \frac{110}{7}$$

$$9) \frac{x}{2} + \frac{x}{3} - \frac{x}{4} = \frac{1}{2}$$

$$10) 3x + \frac{1}{9} = \frac{x+3}{3}$$

$$11) \frac{x}{3} + \frac{x}{4} = \frac{x}{2} + 13$$



Rational Equations

Solutions

1) $x = 6$

2) $x = 60$

3) $x = 12$

4) $x = 18$

5) $x = 9$

6) $\frac{3a - 6}{4}$

7) $x = 8$

8) $x = 10$

9) $x = \frac{6}{7}$

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

11) $x = 156$