<u>RATIONAL EQUATIONS</u>

➢ **Solve.**

1) $\dfrac{x}{2} + \dfrac{5}{6} = \dfrac{x}{3}$

2) $\dfrac{x}{5} - \dfrac{2}{9} = \dfrac{x}{15}$

3) $\dfrac{x}{3} = \dfrac{x+1}{7}$

4) $\dfrac{2t-1}{6} = \dfrac{t+2}{4} + \dfrac{1}{3}$

5) $\dfrac{y^2}{4} - \dfrac{3y}{2} + 2 = 0$

6) $\dfrac{t(t-1)}{3} = \dfrac{t+1}{2}$

7) $\dfrac{u(u-1)}{2} + \dfrac{1}{3} = \dfrac{u(2-u)}{4}$

8) $1 - \dfrac{3}{y} = 4$

9) $\dfrac{8}{2x-1} = 2$

10) $\dfrac{4}{x-4} = \dfrac{2}{x-2}$

11) $\dfrac{x-2}{5} = \dfrac{1}{x+2}$

12) $\dfrac{3}{x-2} = \dfrac{4}{x}$

13) $\dfrac{3}{x-4} + 2 = \dfrac{5}{x-4}$

14) $\dfrac{-4}{a-4} = 3 - \dfrac{a}{a-4}$

15) $\dfrac{x}{2} + \dfrac{20}{x} = 7$

16) $3x = \dfrac{4}{x} - \dfrac{13}{2}$

17) $5 - \dfrac{2}{2x-5} = \dfrac{3}{2x-5}$

18) $\dfrac{2}{4y^2-9} + \dfrac{1}{2y-3} = \dfrac{3}{2y+3}$

19) $\dfrac{5}{x-2} - \dfrac{2}{x+2} = \dfrac{3}{x^2-4}$

20) $\dfrac{9}{x^2+7x+10} = \dfrac{5}{x+2} - \dfrac{3}{x+5}$

21) $\dfrac{x-3}{x} = \dfrac{x-4}{x-2}$

22) $\dfrac{6t^2-t-1}{3(t^2+1)} = 2$

23) $\dfrac{(y+1)^2}{(y-3)^2} = 1$

24) $\dfrac{1}{s} + \dfrac{s}{s+2} = 1$

25) $\dfrac{5}{u^2+u-6} = 2 - \dfrac{u-3}{u-2}$

26) $\left(\dfrac{x-3}{x+1}\right)^2 = 2 \cdot \dfrac{x-3}{x+1} + 3$