Solving equations with fractions

Mana Maths

Te reo Māori terms

whārite
equation
Open in Te Aka

hautau
fraction
Open in Te Aka

taurangi
variable
Open in Te Aka

whakaoti
solve
Open in Te Aka

Solving equations with fractions — Foundation

Clear the fractions first, then solve.

1. $\frac{x}{2} = 5$

2. $\frac{a}{3} = 4$

3. $\frac{m}{4} = 3$

4. $\frac{p}{5} = 7$

5. $\frac{b}{2} + 3 = 8$

6. $\frac{c}{3} + 1 = 6$

7. $\frac{d}{4} - 2 = 5$

8. $\frac{e}{5} + 4 = 9$

9. $\frac{2f}{3} = 10$

10. $\frac{3g}{4} = 9$

11. $\frac{5h}{2} = 20$

12. $\frac{3k}{5} = 12$

13. $\dfrac{x+3}{2} = 7$

14. $\dfrac{n-4}{3} = 5$

Solving equations with fractions — Proficient

Solve each equation. Simplify your answer if needed.

1. $\frac{x}{3} + 4 = 9$

2. $\frac{y}{4} - 2 = 5$

3. $\frac{a + 5}{2} = 8$

4. $\frac{b - 7}{3} = 4$

5. $\frac{2c}{5} + 1 = 7$

6. $\frac{3d}{4} - 6 = 3$

7. $\frac{m - 2}{5} + 3 = 7$

8. $\frac{n + 4}{6} - 1 = 2$

9. $\frac{2p + 1}{3} = 5$

10. $\frac{3q - 2}{4} = 4$

11. $\frac{5r + 7}{2} = 18$

12. $\frac{4s - 5}{3} = 9$

Solving equations with fractions — Excellence

Multiply by a common denominator where useful.

1. $\frac{x}{2} + \frac{x}{3} = 10$

2. $\frac{a}{4} + \frac{a}{2} = 9$

3. $\frac{m-1}{3} = \frac{5}{2}$

4. $\frac{2n+3}{5} = \frac{7}{2}$

5. $\frac{p}{3} - \frac{1}{2} = 4$

6. $\frac{q}{4} + \frac{3}{5} = 2$

7. $\frac{2r-1}{6} = \frac{5}{3}$

8. $\frac{3s+4}{8} = \frac{7}{4}$

9. $\frac{x+2}{3} + \frac{x-1}{6} = 6$

10. $\frac{2y-5}{4} + \frac{y+1}{2} = 7$

11. $\frac{3a+2}{5} - \frac{a-1}{2} = 4$

12. $\frac{b}{2} + \frac{b}{5} - 3 = 4$

13. $\dfrac{c+4}{3} = \dfrac{c-2}{6} + 5$ **14.** $\dfrac{2d-1}{4} = \dfrac{d+5}{2}$ **15.** $\dfrac{3t}{4} - \dfrac{t}{6} = 7$ **16.** $\dfrac{u+3}{2} - \dfrac{u-1}{3} = 5$