

### Example 1

### Example 2

Solve the equation:  $\frac{3x-1}{6} - \frac{x-3}{4} = \frac{4}{3}$

### Exercise 21.2

Solve the following equations:

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

2.  $\frac{3x}{5} = 3$

3.  $\frac{x}{2} = \frac{6}{4}$

4.  $\frac{3x-9}{4} = \frac{9}{2}$

Solve the following equations:

5.  $\frac{5x}{3} = 10$

6.  $\frac{x-3}{2} = 4$

7.  $\frac{3x-1}{4} = 2$

8.  $\frac{3x-1}{4} = 8$

Solve the following equations:

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

10.  $\frac{2x-5}{3} = \frac{x-2}{3}$

11.  $\frac{x-3}{4} = \frac{x-2}{5}$

12.  $\frac{x+2}{6} = \frac{2x-5}{3}$

Solve the following equations:

13.  $\frac{2x}{5} + \frac{x}{2} = \frac{9}{2}$

14.  $\frac{2x}{3} - \frac{x}{4} = \frac{5}{6}$

15.  $\frac{3x}{4} - \frac{5x}{8} = \frac{1}{2}$

16.  $\frac{2x}{3} - \frac{x}{4} = \frac{5}{2}$

Solve the following equations:

17.  $\frac{2x-1}{3} + \frac{x}{4} = \frac{6}{4}$

18.  $\frac{x-3}{6} - \frac{x}{5} = \frac{3}{2}$

19.  $\frac{x+2}{4} + \frac{x-3}{2} = \frac{1}{2}$

20.  $\frac{x+2}{4} - \frac{x-3}{3} = \frac{1}{2}$

Solve the following equations:

21.  $\frac{3x-1}{6} - \frac{x-3}{4} = \frac{4}{3}$

22.  $\frac{x-2}{5} + \frac{2x-3}{10} = \frac{1}{2}$

23.  $\frac{2x-3}{5} + \frac{1}{20} = \frac{x-1}{4}$

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

Solve the following equations:

25.  $\frac{x-2}{3} + \frac{x-3}{4} = \frac{x-1}{2}$

26.  $\frac{2x-1}{4} - \frac{x-1}{5} = 1$

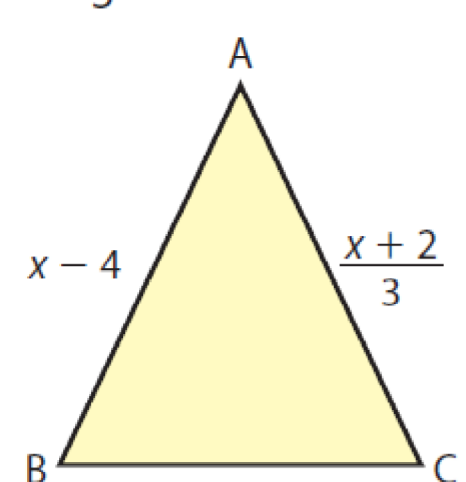
27.  $\frac{3x-2}{6} - \frac{3x+1}{4} = \frac{2}{3}$

28.  $\frac{3(x-4)}{5} + 3 = \frac{3(x-5)}{2}$

Solve the following equations:

29.  $\frac{4x+5}{5} + \frac{2x+7}{2} + \frac{3x}{10}$

30. The diagram shows an isosceles triangle ABC.



If  $|AB| = |AC|$ ,

- (i) write down an equation in terms of  $x$ .
- (ii) work out the length of  $|AB|$ .

## Answers

### Exercise 21.2

1.  $x = 9$     2.  $x = 5$     3.  $x = 3$   
4. 6    5. 6    6. 11    7. 3    8. 11  
9.  $\frac{1}{4}$     10. 3    11. 7    12. 4    13. 5  
14. 2    15. 4    16. 6    17. 2    18. 30  
19. 2    20. 12    21. 3    22. 3    23. 2  
24. 1    25. 11    26.  $3\frac{1}{3}$     27. -5    28. 30  
29. -3    30. (i)  $x - 4 = \frac{x+2}{3}$     (ii)  $|AB| = 3$

