

### Exercise Set 10.1

Solve each of the following equations, including checking your answers.

1.  $x + 3 = 12$
2.  $x + 11 = 5$
3.  $3x = 17$
4.  $7x = 13$
5.  $\frac{x}{5} = 2$
6.  $\frac{x}{11} = 4$
7.  $\frac{3}{5}z = 4$
8.  $\frac{2}{3}z = 5$
9.  $2x - 3 = 8$
10.  $-3x + 1 = 13$
11.  $\frac{1}{4}x + 3 = 7$
12.  $\frac{2}{5}x - 1 = -3$
13.  $2x + \frac{1}{3} = 4$
14.  $3x + \frac{2}{9} = 2$
15.  $\frac{1}{3}x + 2 = \frac{4}{3}$
16.  $\frac{3}{10}x - \frac{1}{10} = 1$
17.  $\frac{1}{7}y + 3 = \frac{2}{3}$
18.  $\frac{1}{8}y + 2 = \frac{3}{5}$
19.  $3(x - 5) = 2(x + 1)$
20.  $4(x - 2) = 5(x + 2)$
21.  $\frac{2}{x} = 5$
22.  $\frac{3}{x} = 2$
23.  $5(x + 3) + 1 = 0$
24.  $2(x + 2) + 4 = 0$
25.  $3x - 5 + x - 2 = 7x - 4 - x$
26.  $2x + 6 - 3x + 4 = 5x + 5 + x$
27.  $-3(2x - 7) = 5 + 2(9 - x)$
28.  $-2(3x - 5) = 4 + 3(8 - x)$
29.  $\frac{8x + 1}{8} = 7$
30.  $\frac{3x - 5}{3} = 1$
31.  $\frac{3x}{7} = \frac{5}{2}$
32.  $\frac{2x}{3} = \frac{1}{4}$
33.  $\frac{2x - 5}{3} = \frac{5x + 2}{2}$
34.  $\frac{3x + 7}{5} = \frac{2x - 9}{3}$
35.  $\frac{3 + 2x}{x} = 5 - \frac{1}{x}$
36.  $\frac{4 - 3x}{x} = \frac{2}{x} + 4$
37.  $-2(3 - 2x) + 4(2 - 5x) = 0$
38.  $3(5 - x) - 2(3 - 4x) = 0$
39.  $\frac{4x}{7} - 3 = \frac{1}{5} + x - 3$
40.  $\frac{3x}{5} - 2 = \frac{2}{3} + 3x - 5$