Solve each equation. Check your solution.

1. \(2x + 1 = 9\)
   \[
   \begin{align*}
   2x &= 8 \\
   x &= 4
   \end{align*}
   \]

2. \(3w + 5 = 23\)
   \[
   \begin{align*}
   3w &= 18 \\
   w &= 6
   \end{align*}
   \]

3. \(\frac{3}{8}n + 1 = -25\)
   \[
   \begin{align*}
   \frac{3}{8}n &= -26 \\
   n &= -69.3
   \end{align*}
   \]

4. \(7k - 3 = 32\)
   \[
   \begin{align*}
   7k &= 35 \\
   k &= 5
   \end{align*}
   \]

5. \(\frac{5}{2}a = -4\)
   \[
   \begin{align*}
   a &= -36
   \end{align*}
   \]

6. \(-\frac{2}{3}w + 5 = 4\)
   \[
   \begin{align*}
   \frac{3}{2}w &= 1 \\
   w &= 1.5
   \end{align*}
   \]

7. \(8x + 7 = -9\)
   \[
   \begin{align*}
   8x &= -16 \\
   x &= -2
   \end{align*}
   \]

8. \(3g - 49 = -7\)
   \[
   \begin{align*}
   3g &= 42 \\
   g &= 14
   \end{align*}
   \]

9. \(-\frac{1}{2}x - 7 = 18\)
   \[
   \begin{align*}
   -\frac{1}{2}x &= 25 \\
   x &= -50
   \end{align*}
   \]

10. \(-9d - 1 = 17\)
    \[
    \begin{align*}
    -9d &= 18 \\
    d &= -2
    \end{align*}
    \]

11. \(-\frac{4}{5}x + 1 = -13\)
    \[
    \begin{align*}
    -\frac{4}{5}x &= -14 \\
    x &= 17.5
    \end{align*}
    \]

12. \(-5(x - 6) = 15\)
    \[
    \begin{align*}
    -5x &= -15 \\
    x &= 3
    \end{align*}
    \]
Solve each equation. Check your solution.

13. \[4(x + 9) = 20\]
   \[4x + 36 = 20\]
   \[-36\]
   \[4x = -16\]
   \[x = -4\]

14. \[6(x + 12) = -42\]
   \[6x + 72 = -42\]
   \[-72\]
   \[6x = -114\]
   \[x = -19\]

15. \[\frac{5}{3}(x + 7) = 11.25\]
   \[\frac{5}{3}x + \frac{35}{3} = 11.25\]
   \[-\frac{35}{3}\]
   \[\frac{5}{3}x = -8\]
   \[x = -\frac{24}{5}\]

16. \[8.2(x - 7) = -24.6\]
   \[8.2x - 57.4 = -24.6\]
   \[57.4\]
   \[8.2x = 32.8\]
   \[x = 4\]

17. \[\frac{2}{5}(x - 16) = -6\]
   \[\frac{2}{5}x - \frac{32}{5} = -6\]
   \[+\frac{32}{5}\]
   \[\frac{2}{5}x = -\frac{8}{5}\]
   \[x = 2\]

18. \[\frac{2}{3}(x - 19) = -15\]
   \[\frac{2}{3}x - \frac{38}{3} = -15\]
   \[+\frac{38}{3}\]
   \[\frac{2}{3}x = -\frac{7}{3}\]
   \[x = -6\]

20. An online retailer charges $6.99 plus $0.55 per pound to ship electronics purchases. How many pounds is a DVD player for which the shipping charge is $11.94?

   \[6.99 + 0.55x = 11.94\]
   \[0.55x = 4.95\]
   \[x = 9\]

   **9 pounds**

21. Caitlin has a $10 gift certificate to the music store. She has chosen a number of CDs from the $7 bargain bin. If the cost of the CDs is $32 after the gift certificate is credited, how many CDs did Caitlin buy?

   \[-7x - 10 = 32\]
   \[+10\]
   \[\frac{-7x}{7} = \frac{42}{7}\]
   \[x = 6\]

   **6 CDs**

22. Alma subscribes to a website for processing her digital pictures. The subscription is $5.95 per month and 4-by-6-inch prints are $0.19 each. How many prints does Alma purchase if the charge for January is $15.83?

   \[-5.95 + 0.19x = 15.83\]
   \[-5.95\]
   \[0.19x = 21.78\]
   \[\frac{0.19x}{0.19} = \frac{21.78}{0.19}\]
   \[x = 115\]

   **52 prints**