Solve each of the following equations. Make sure to check your solutions.

1. $3x - 5 = -x + 11$
2. $2a - 5 = -2a + 5$
3. $-\frac{3}{5}y + \frac{1}{2} = -\frac{3}{10}y + \frac{9}{20}$
4. $5 - x = 2(x - 1) + 7$
5. $3(x - 3) = 5(-2x + 1) - x$
6. $2(b - 1) - 3(b - 4) = -2b + 1$
7. $\frac{3m + 4}{5} - \frac{2m - 5}{3} = 9 - m$
8. $\frac{2}{5}(x - 1) + 5 = \frac{3}{4}(x + 1)$
9. $0.3x - 0.2(5x - 1) = -0.2x + 2.7$
10. $\frac{\frac{2x - 3}{5} + 1}{6} - 7 = -1$
11. $(3a - 1)^2 - 2(a - 2)(5a + 1) = (5 + a)(5 - a) + 2a$
12. $-5 - (2x - 1)^2 = 3x + 2 - x(4x + 1)$
13. $(2x - 3)^2 - x(3x - 7) = (x - 3)^2$

Answers

1. 4 2. $\frac{5}{2}$ 3. $\frac{1}{6}$ 4. 0 5. 1 6. -9 7. 7 8. 11 9. -5 10. 89 11. 2 12. 4 13. 0