

1. Solve $5x+3=9x-7+2x$
2. Solve $\frac{3}{x^2-3x} + \frac{4}{x} = \frac{1}{x-3}$
3. Solve for w : $P = 2l + 2w$
4. A picture frame has a total perimeter of 21 feet. The width is $\frac{3}{4}$ of the height. Find the dimensions of the picture frame.
5. Simplify and write the result in standard form $(11-5i) - (-4+3i)$
6. Simplify and write the result in standard form $(\frac{3}{5} - \frac{5}{6}i) + (\frac{4}{3} + \frac{1}{3}i)$
7. Simplify and write the result in standard form $(3-5i)(-2+4i)$
8. Simplify and write the result in standard form $\frac{2-5i}{1-2i}$
9. Solve by factoring $x^2 - 4x - 32 = 0$
10. Solve by extracting square roots $(3x-1)^2 - 16 = 0$
11. Solve using the quadratic formula $2x^2 - 7 = -6x$
12. Solve using the quadratic formula $x^2 + 4x + 13 = 0$
13. Solve using the quadratic formula $4x^2 + 25 = 20x$
14. Solve $x^4 - x^2 - 20 = 0$
15. Solve $6\left(\frac{t}{t+2}\right)^2 - 13\left(\frac{t}{t+2}\right) + 6 = 0$. Hint $6a^2 - 13a + 6 = (2a-3)(3a-2)$
16. Solve $\sqrt{5x-26} = x-4$
17. Solve $\frac{6}{x+2} - \frac{5}{x+4} = 1$