

While there are some similarities between the problems below (including cases where one problem in its *entirety* is a portion of another problem), it is important to understand each problem for what is really being asked:

1. Factor the expression $x^2 + 2x - 15$ [key]
2. Rewrite the expression $x^2 + 2x - 15$ in the form $(x + h)^2 + k$ [key]
3. Solve the equation $x^2 + 2x - 15 = 0$ [key]
4. Solve the inequality $x^2 + 2x - 15 > 0$ [key]
5. Solve the inequality $x^2 + 2x - 15 \geq 0$ [key]
6. Solve the inequality $x^2 + 2x - 15 < 0$ [key]
7. Solve the inequality $x^2 + 2x - 15 \leq 0$ [key]
8. Find the y -intercept(s) of the graph of $y = x^2 + 2x - 15$ [key]
9. Find the x -intercept(s) of the graph of $y = x^2 + 2x - 15$ [key]
10. Find the zeroes of the function $f(x) = x^2 + 2x - 15$ [key]
11. Find the roots of the function $f(x) = x^2 + 2x - 15$ [key]
12. Graph the function $f(x) = x^2 + 2x - 15$ [key]
13. Find all x such that $f(x) = 0$ if $f(x) = x^2 + 2x - 15$ [key]
14. Find all x such that $f(x) = -16$ if $f(x) = x^2 + 2x - 15$ [key]
15. Find $(f \circ f)(x)$ if $f(x) = x^2 + 2x - 15$ [key]
16. Find the domain of the function $f(x) = \frac{1}{x^2 + 2x - 15}$ [key]
17. Find the domain of the function $f(x) = \sqrt{x^2 + 2x - 15}$ [key]
18. Find the domain of the function $f(x) = \log_3(x^2 + 2x - 15)$ [key]
19. Graph the equation $y = x^2 + 2x - 15$ [key]
20. Graph the equation $y = (x - 3)(x^2 + 2x - 15)$ [key]
21. Graph the equation $y = \frac{x - 3}{x^2 + 2x - 15}$ [key]
22. Find the domain and range of the function $f(x) = \frac{x - 3}{x + 5}$ [key]
23. Solve the inequality $2x - 15 > 3$ [key]
24. Solve the inequality $|2x - 15| > 3$ [key]
25. Solve the inequality $|2x - 15| \geq 3$ [key]
26. Solve the inequality $|2x - 15| < 3$ [key]
27. Solve the inequality $|2x - 15| \leq 3$ [key]