

Homework 3.4

1. $z = -7, -8$ 2. $x = -1, 5$ 3. $x = 2, 3$ 4. $m = -11, 9$ 5. 0, 1 real solution
6. 5, 2 real solutions 7. -32, 0 real solutions 8. $s = -1, 3$ 9. $r = 1, 8$ 10. $x = -2, 4$
11. $x = -\frac{4}{3}, \frac{1}{15}$ 12. $p = -5, -3$ 13. $n = -2, 9$ 14. $y = -\frac{3 \pm \sqrt{39}}{3}$
15. -223, 0 real solutions 16. -20, 0 real solutions 17. 173, 2 real solutions
18. $t = \frac{3}{4}$ 19. $x = -\frac{5}{2}, \frac{5}{14}$ 20. $x = \frac{7 \pm \sqrt{41}}{4}$
21. The equation must first be set equal to zero. $x^2 + 6x + 6 = 0$ $x = -3 \pm \sqrt{3}$
22. positive 23. negative 24. zero 25. 1141m, 2090 m
26. $v = -\frac{5 \pm 2\sqrt{10}}{5}$ 27. $x = \frac{-5 \pm \sqrt{85}}{12}$
28. $\frac{-b + \sqrt{b^2 - 4ac}}{2a} + \frac{-b - \sqrt{b^2 - 4ac}}{2a} = \frac{-2b}{2} = \frac{-b}{a}$ which is the formula for the axis of symmetry.
29. 6 30a) $c < 4$ b) $c = 4$ c) $c > 4$ 31. $-\frac{1}{3}x^2 - \frac{1}{3}x + 4 = 0$