

SM2H 3.8 – Solving Using the Quadratic Formula

1. 11

2. $9i$

3. $\frac{2}{3}$

4. $4\sqrt{3}$

5. $5i\sqrt{3}$

6. $2\sqrt{2}$

7. $\frac{1+\sqrt{6}}{2}, \frac{1-\sqrt{6}}{2}$

8. $\frac{5+6i\sqrt{2}}{5}, \frac{5-6i\sqrt{2}}{5}$

9. 0, 1 real number solution

10. 9, 2 real numbers

11. -11, 2 complex solutions

12. 2 complex solutions,
negative discriminant

13. 1 real number, 0
discriminant

14. 2 real solutions, positive
discriminant

15. $x = 3, -4$

16. $n = \frac{1+3i\sqrt{3}}{4}, \frac{1-3i\sqrt{3}}{4}$

17. $p = \frac{2+4i}{5}, \frac{2-4i}{5}$

18. $u = \frac{\sqrt{14}}{4}, -\frac{\sqrt{14}}{4}$

19. $q = \frac{5+i\sqrt{7}}{4}, \frac{5-i\sqrt{7}}{4}$

20. $t = \frac{7}{9}, 0$

21. $k = 1+2\sqrt{3}, 1-2\sqrt{3}$

22. $x = \frac{-1+3i}{4}, \frac{-1-3i}{4}$