

3.4 Practice B

1. $x = -4$ and $x = 1$

2. $x = -1$

3. $x = -\frac{5}{2} \pm \frac{\sqrt{55}}{2}i$

4. $x = \frac{3 \pm \sqrt{89}}{8}$

5. $x = -6 \pm \sqrt{51}$

6. $x = 1 \pm \frac{\sqrt{66}}{3}i$

7. -24; two imaginary solutions
8. 0; one real solution 9. 132; two real solutions
10. -23; two imaginary solutions
11. $7x^2 - 10x + 6 = 0$ 12. $4x^2 + 3x - 1 = 0$
13. $x = 1$; square root; perfect square after factoring out 7
14. $x = -10 \pm 6\sqrt{3}$; complete the square; even middle term and leading coefficient of 1
15. $x = -\frac{1}{2} \pm \frac{\sqrt{7}}{2}i$; Quadratic Formula; odd middle term
16. $x = 2$ and $x = 4$; factoring; easy to factor