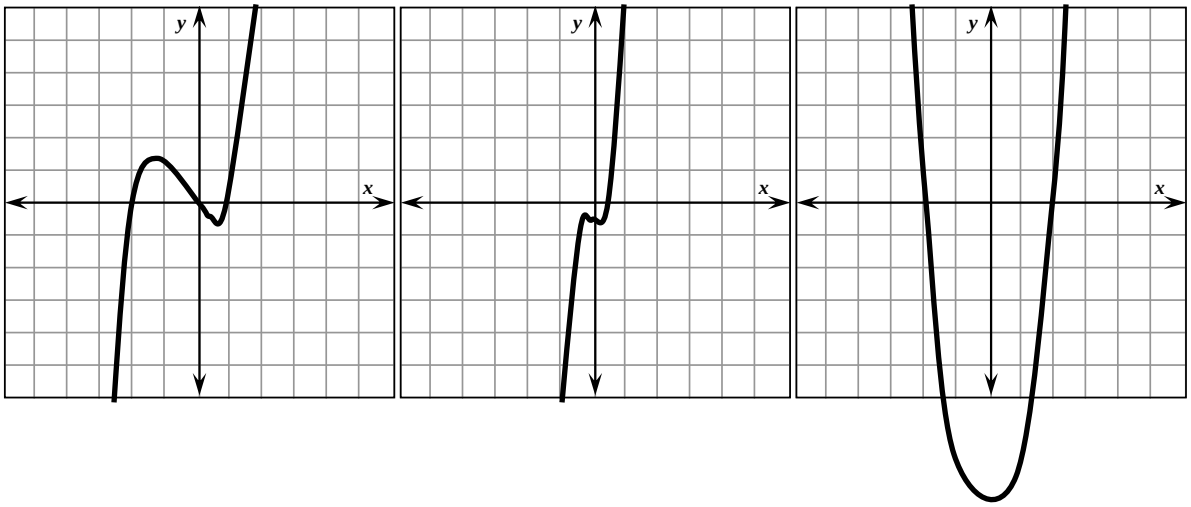
4.1 Worksheet Answers

1. $k < 25$
2. $k < -4$
3. $k = \frac{1}{2}$
4. $k^2 > 9$ so then $k < -3 or k > 3$
5. $b = -6$ other root is $x = -\frac{4}{5}$
6. $b = -4$ other root is $x = 2 - 2i$
7. $c = -\frac{63}{4}$ other root is $x = -\frac{7}{2}$
8. $c = 8$ other root is $x = 2$ (discriminant = 0 for a double root)
9. $y = x^3 - 7x^2 + 9x + 5$ (Use Sum & Product)(FOIL (x – 5)(x^2 – 2x – 1))
10. Roots: $0, -2, 1$
11. Roots: 1 (only 1 real)
12. Roots: $-2, 2$

10. 11. 12.