

Chapter 7

Algebraic Equations II



Section 7.2.1

$$\underline{a(x + \lambda)^2} + \underline{\mu} = 0$$

1. Square term

2. Constant term



Fig. 7-1: When $b^2 - 4ac > 0$ illustrated.

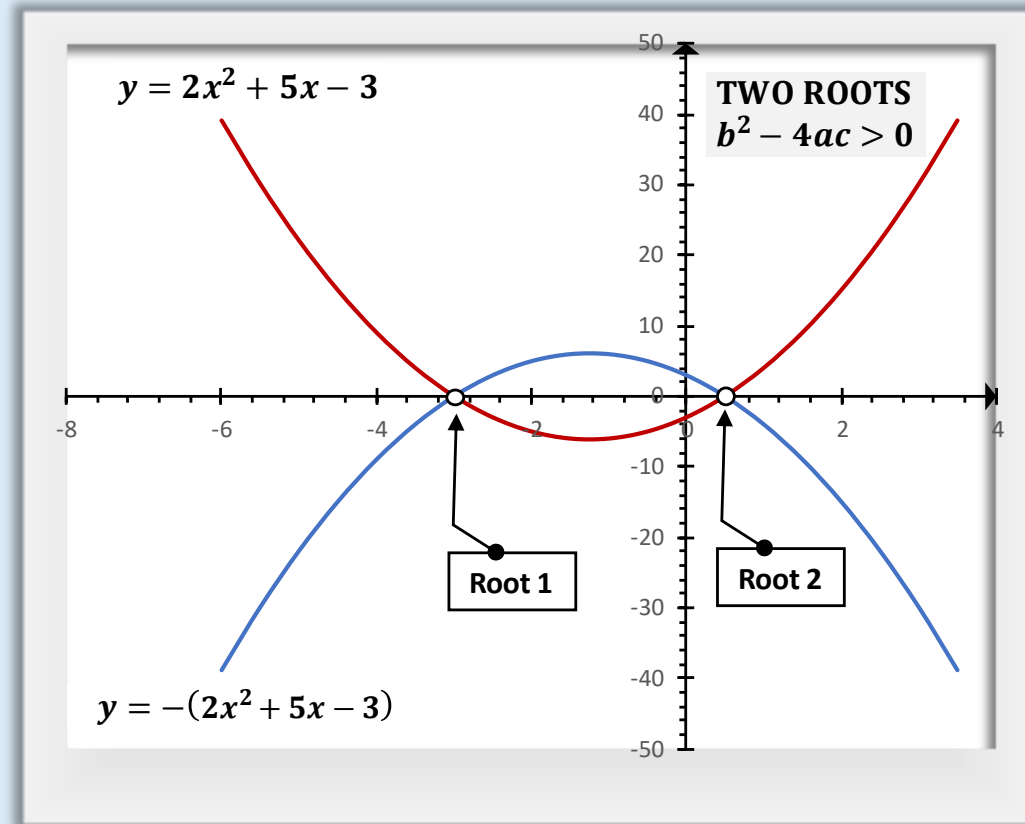


Fig. 7-2: When $b^2 - 4ac = 0$ illustrated.

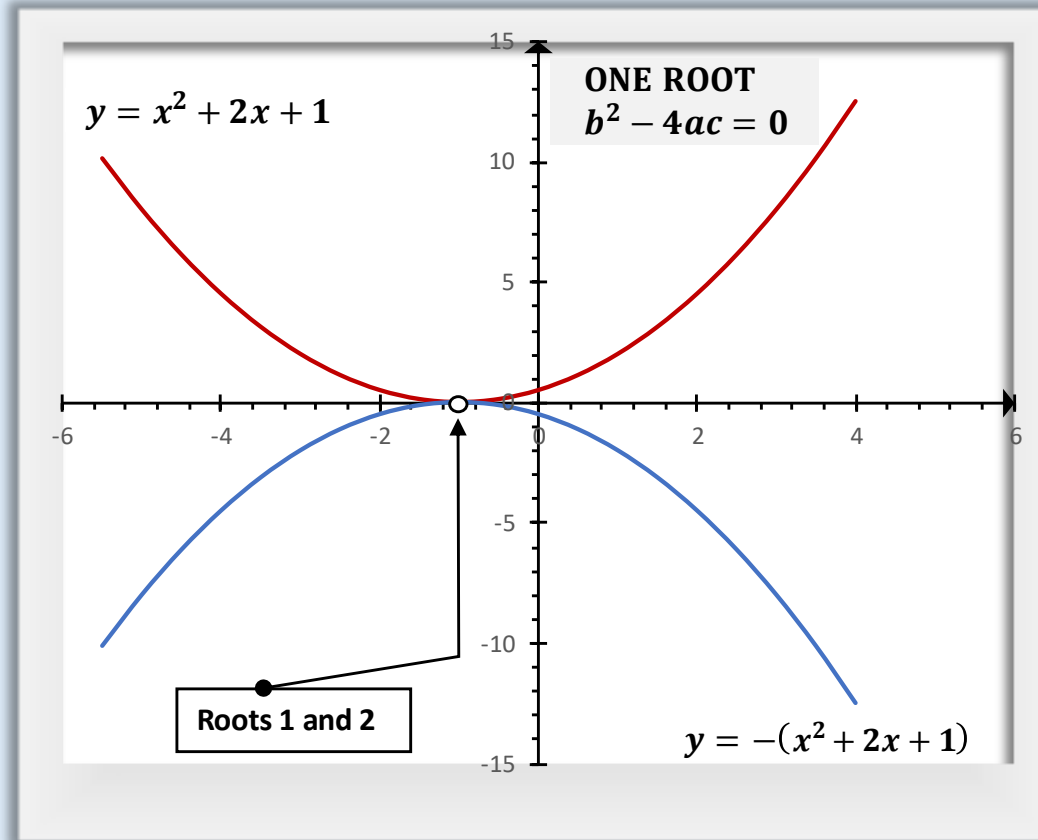


Fig. 7-3: When $b^2 - 4ac < 0$ illustrated.

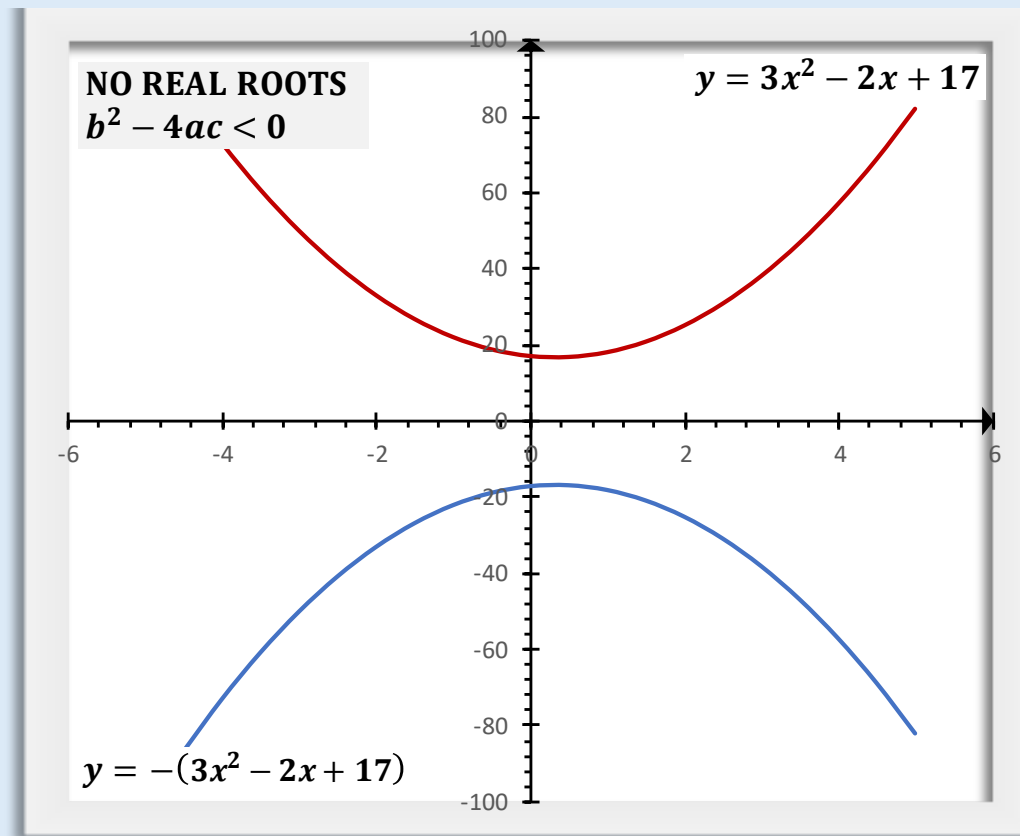


Fig. 7-4: Graph of a quadratic equation showing intercepts and a vertex.

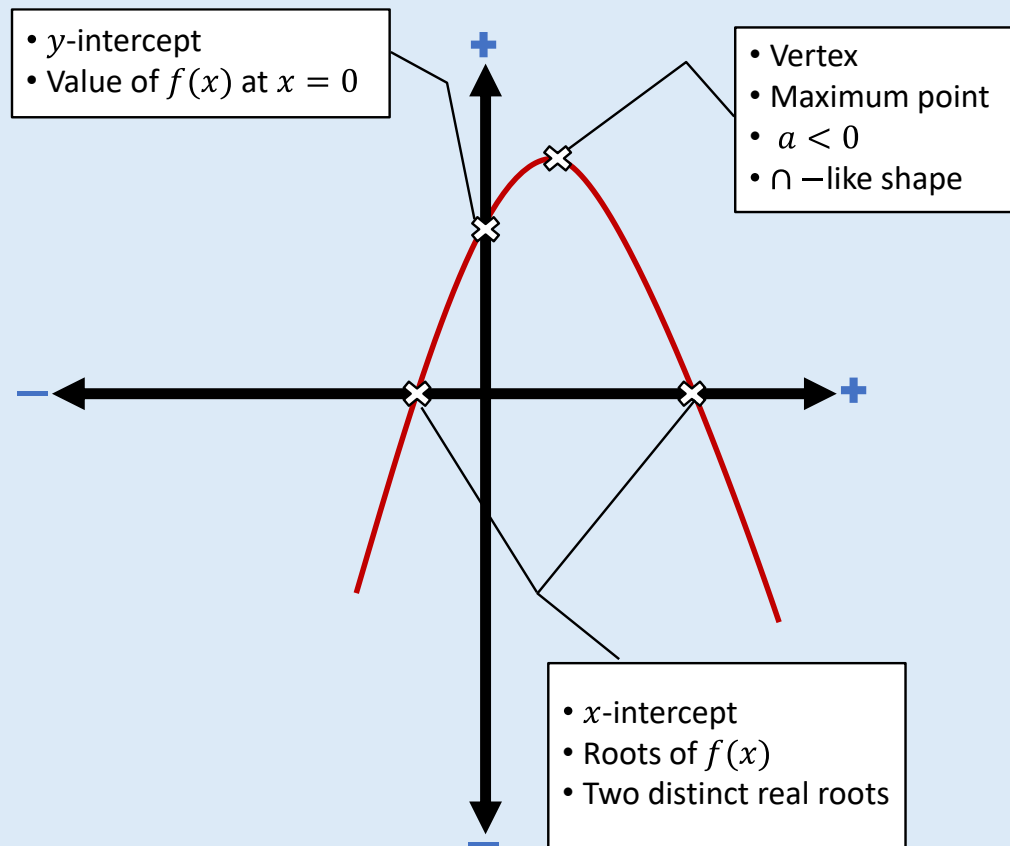


Fig. 7-5: Solution to Example 13(a).

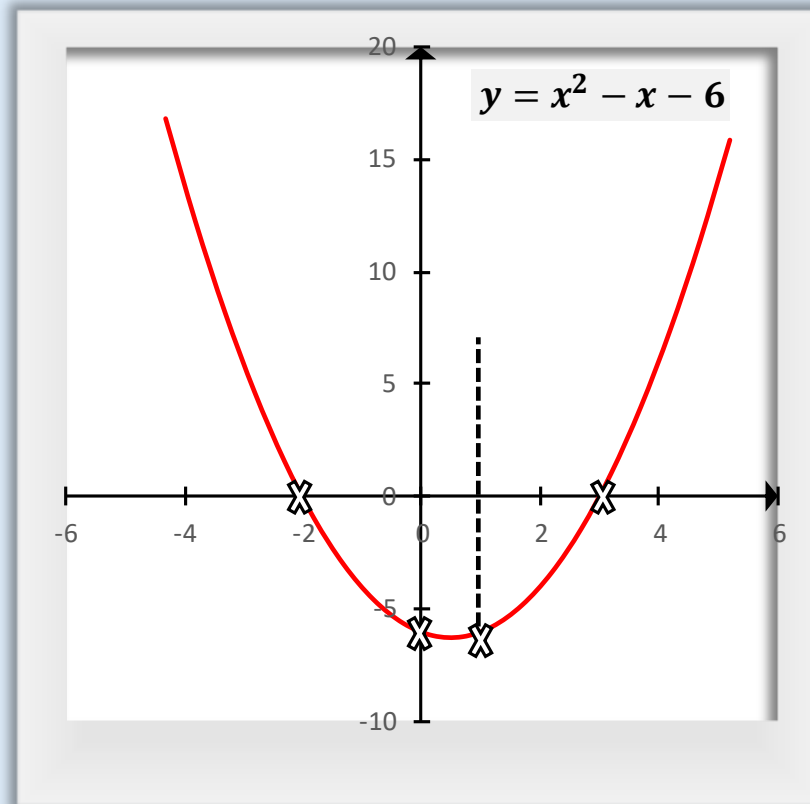


Fig. 7-6: Solution to Example 13(b).

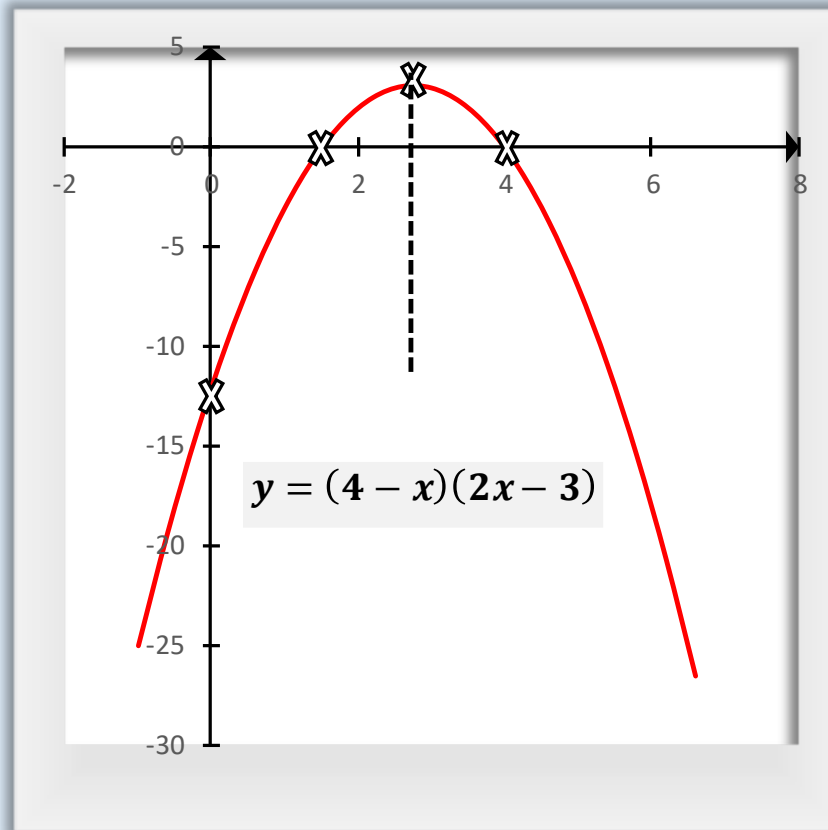


Fig. 7-7: Solution to Example 13(c).

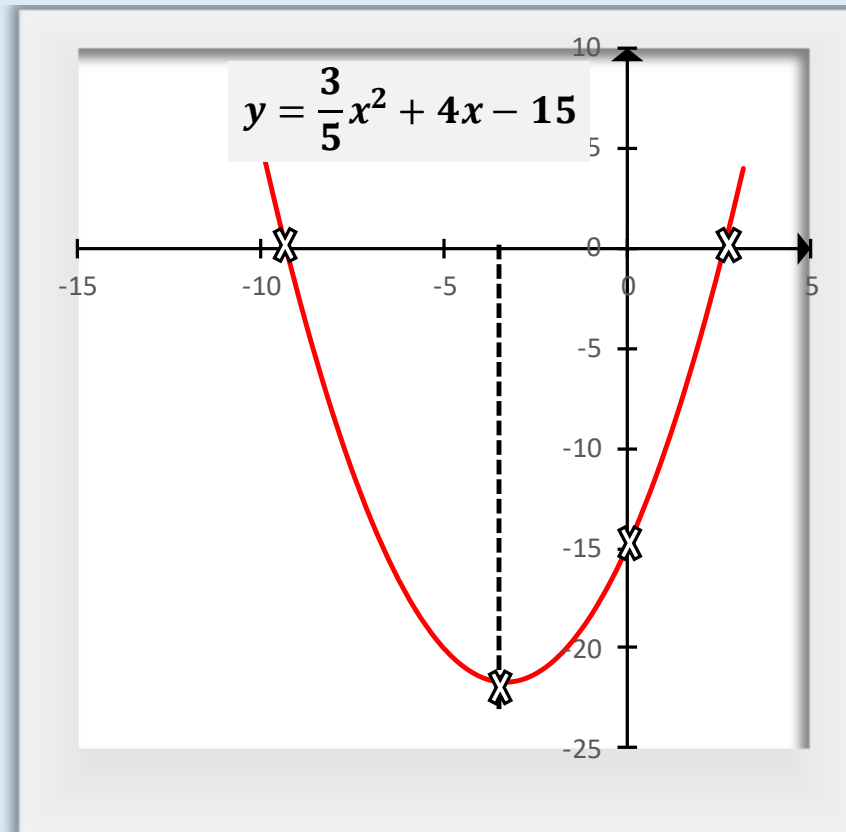


Fig. 7-8: Solution to Example 14(a).

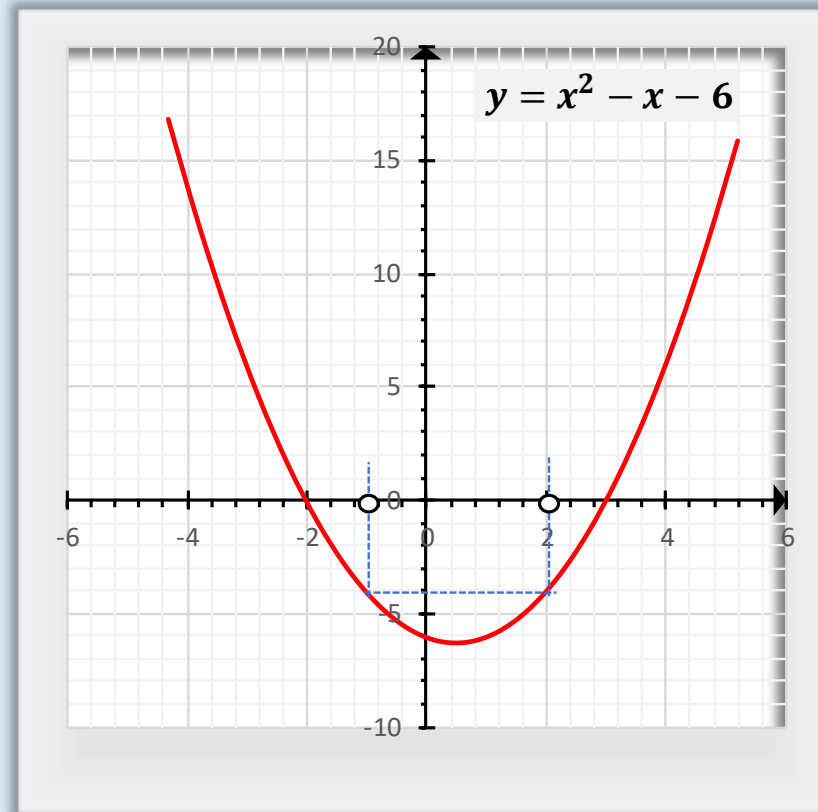


Fig. 7-9: Solution to Example 14(b).

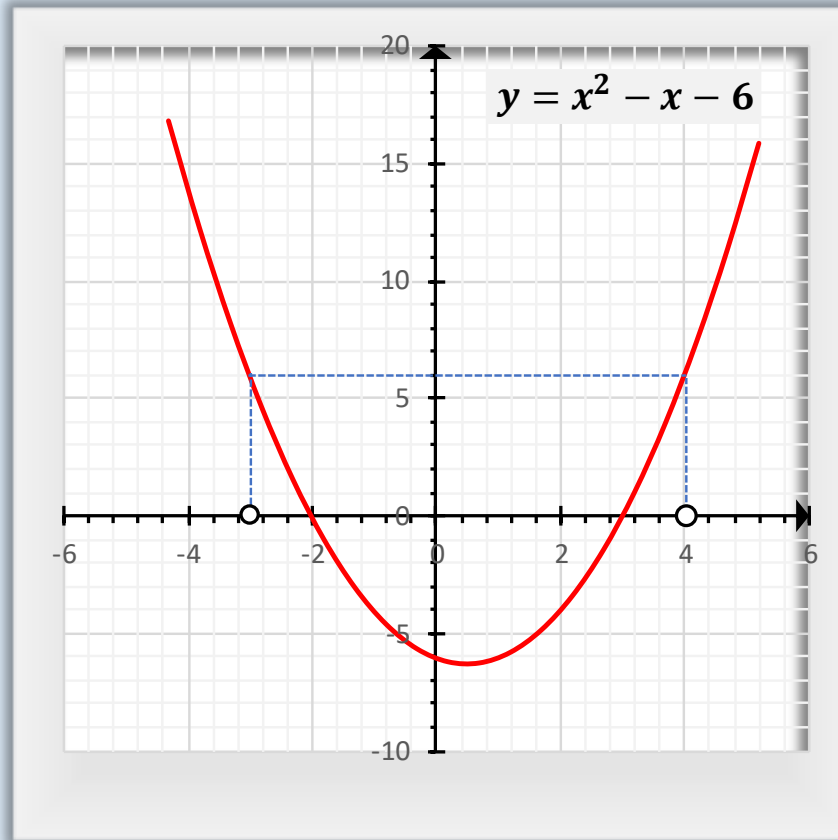


Fig. 7-10: Solution to Example 14(c).

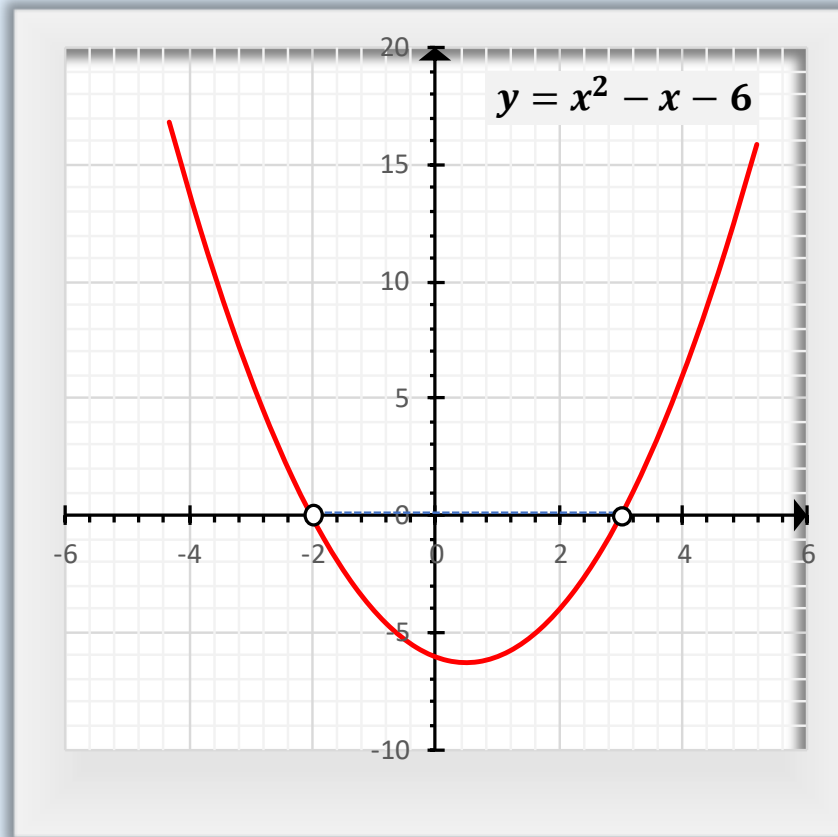


Fig. 7-11: Solution to Example 14(d).

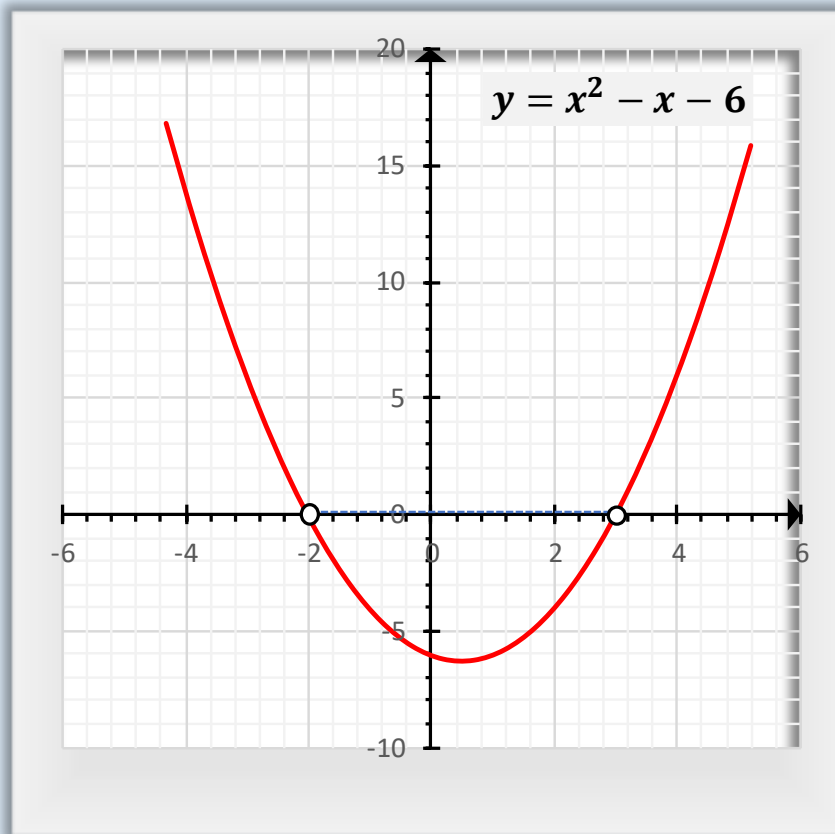


Fig. 7-12: Solution to Example 15.

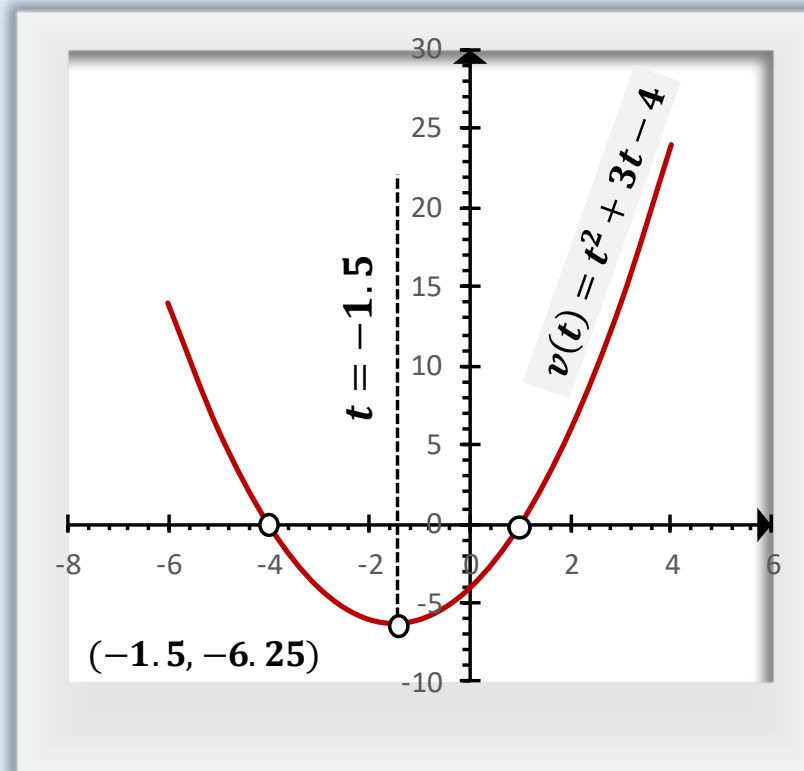
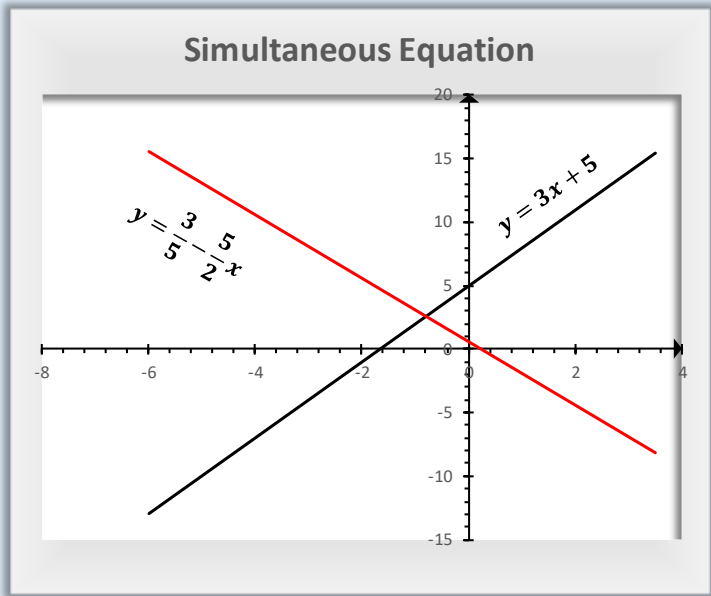
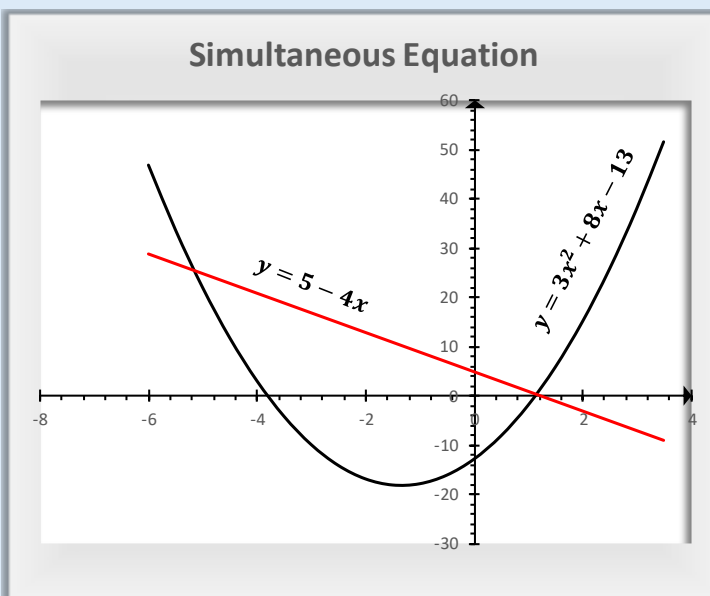


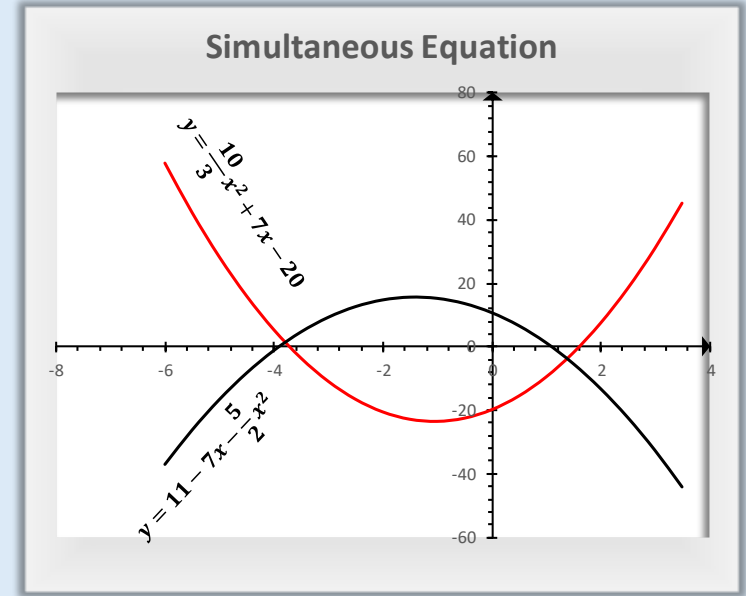
Fig. 7-13: Graphical solutions of simultaneous equations illustrated: (a) two linear equations, (b) a linear equation and a quadratic equation, and (c) two quadratic equations.



(a)

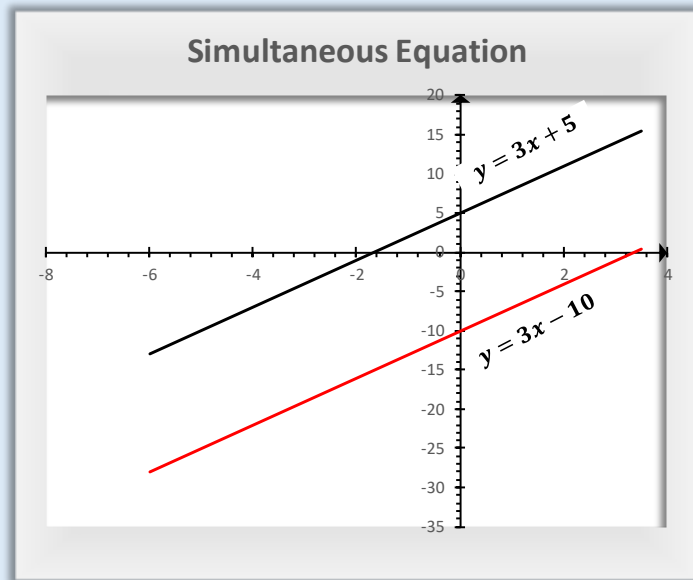


(b)

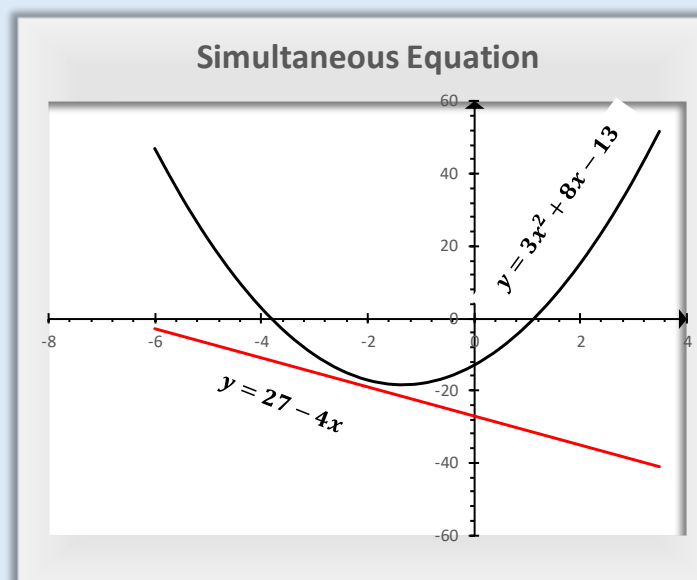


(c)

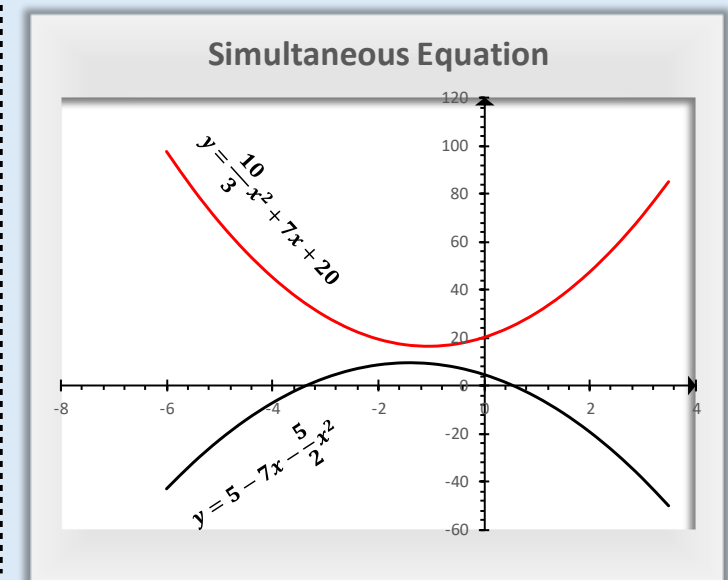
Fig. 7-14: Graphical illustrations of when there are no solutions to a pair of equations: (a) two linear equations, (b) a linear equation and a quadratic equation, and (c) two quadratic equations.



(a)



(b)



(c)

Thank You

