Homework 0 – Creating a Quarto document

Kenny Mendoza

1) To solve the given equation, the quadratic formula can be used:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

For part 1 we obtain $(a = 1, b = -1, c = -2)$ $x = -1, x = 2$; for part 2 we obtain $(a = 1, b = 2, c = 5)$ no solutions; for part 3 we obtain $(a = 1, b = 3, c = 2)$ $x = -2, x = -1$.

2) Define the variables a, b, and c in the R environment (code in the Quarto document)

3) Then, we proceed to plot our equation when a=1, b=3, and c=2 (code in the Quarto document)

$f(x)$ versus x for $x \in (-5, 5)$

a*x^2 + b*x + c

1