

## Exercise 7

For the following exercises, find the  $x$ - or  $t$ -intercepts of the polynomial functions.

$$C(t) = 3(t + 2)(t - 3)(t + 5)$$

### Solution

To find the  $t$ -intercepts, set  $C(t) = 0$  and solve the equation for  $t$ .

$$3(t + 2)(t - 3)(t + 5) = 0$$

$$t + 2 = 0 \quad \text{or} \quad t - 3 = 0 \quad \text{or} \quad t + 5 = 0$$

$$t = -2 \quad \text{or} \quad t = 3 \quad \text{or} \quad t = -5$$

Therefore, the  $t$ -intercepts are  $(-5, 0)$  and  $(-2, 0)$  and  $(3, 0)$ .

