

Quiz 1

Use the ‘completing the square’ method to solve the equation

$$x^2 - 8x = 18.$$

Solution: Add 16 to both sides to get

$$x^2 - 8x + 16 = (x - 4)^2 = 34.$$

Then take square roots to get

$$(x - 4) = \pm\sqrt{34}$$

from which it follows that

$$x = 4 \pm \sqrt{34}.$$