Graph Linear Equations in Standard Form Using Intercepts

Worked example / complete source key

Graph 2x + 3y = 6 using intercepts.

Answer: x-intercept: set y = 0, so 2x = 6 and x = 3, giving (3, 0). y-intercept: set x = 0, so 3y = 6 and y = 2, giving (0, 2). Plot (3, 0) and (0, 2), draw a straight line through them, and check with a third point such as (1.5, 1): 2(1.5) + 3(1) = 3 + 3 = 6, which balances.