ZiloAcademy

✨ Grade 10 Maths — Equations with Parameters ✨

Name: Demo **Date:** 26/11/2026

1. The equation $kx + 3 = 8$ has solution $x = 1$. Find k.

2. For what positive value of k does $x^2 + kx + 49 = 0$ have exactly one solution?

3. The equation $kx - 2 = -44$ has solution $x = -6$. Find k.

4. For what positive value of k does $x^2 + kx + 64 = 0$ have exactly one solution?

5. The equation $kx + 10 = 16$ has solution $x = 2$. Find k.

6. For what positive value of k does $x^2 + kx + 9 = 0$ have exactly one solution?

7. The line $y = mx - 8$ passes through $(-3, -5)$. Find m.

8. For what positive value of k does $x^2 + kx + 100 = 0$ have exactly one solution?

9. The line $y = mx + 8$ passes through $(5, 3)$. Find m.

10. For what positive value of k does $x^2 + kx + 81 = 0$ have exactly one solution?