

1. Quadratic Colouring

Solve the quadratic equations below and then select their answers in the grid to reveal the key!

8	3	9	12	-11	14	-9	1.2	-1.5	10
0.5	7	-8	-6	13	2	1	-3	-13	12
3.5	-10	11	-5	1.5	35	15	2.1	50	-7
2.5	4	29	6	31	-4	31	-14	17	16
-23	-17	5	-1	23	0	-15	60	-60	-21
18	-4.5	-1.2	-2	-35	-18	-50	-7	4.5	22
20	-20	19	-0.5	-22	-31	21	-2.1	-19	-16

$$x^2 + 5x + 6 = 0$$

$$x^2 - 5x + 4 = 0$$

$$x^2 + 7x + 6 = 0$$

$$x^2 - x - 30 = 0$$

$$x^2 - 7x + 10 = 0$$

$$x^2 - 169 = 0$$

2. Factorise and solve the following quadratic equations

$$x^2 - 2x - 10 = 0$$

$$x = \quad \text{or } x =$$

$$2x^2 - 6x + 4 = 0$$

$$x = \quad \text{or } x =$$

$$2x^2 - 8x + 8 = 0$$

$$x =$$

$$3x^2 - 27x + 60 = 0 \quad x = \quad \text{or } x =$$

$$x^2 + 6x + 9 = 0 \quad x =$$

3. Match each quadratic with its solution

$$x^2 + 4x = 5 \quad x = -8 \text{ or } x = -7$$

$$x^2 + 2x = 15 \quad x = 0 \text{ or } x = 7$$

$$x^2 + 15x + 35 = -21 \quad x = 7 \text{ or } x = 10$$

$$x^2 - 7x - 35 = -35 \quad x = -5 \text{ or } x = 3$$

$$x^2 - 17x + 35 = -35 \quad x = -5 \text{ or } x = 1$$