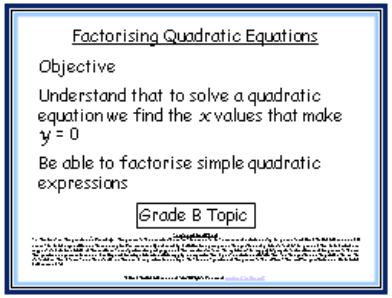
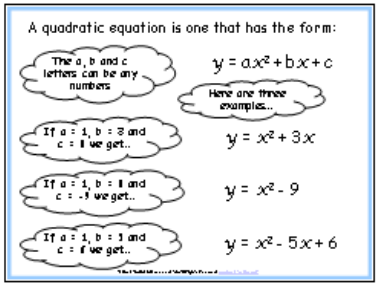
Quadratic Equations - Solve by Factorising - PDF Copy

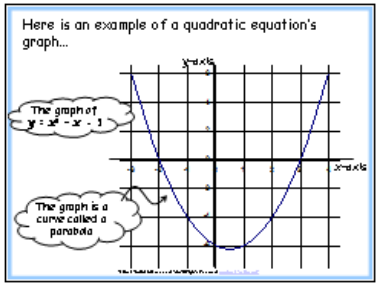
The presentation contains the slides below with the objectives of showing how to: i. Understanding that to solve a quadratic equation we find the x values that make $y = 0$, ii. Be able to factorise simple quadratic expressions. There is an animated explanation and problems with answers.



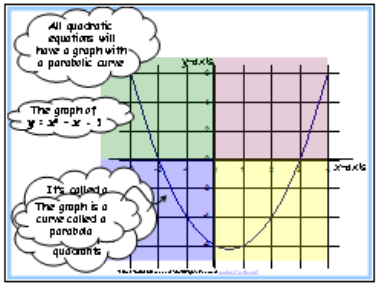
00:15 1



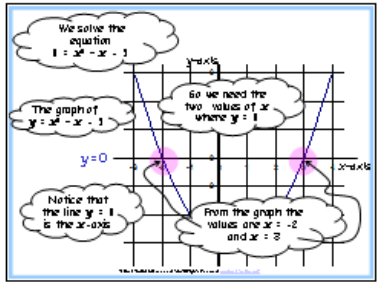
00:15 2



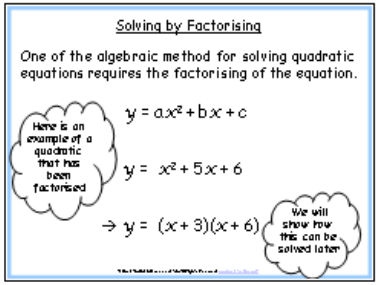
00:15 3



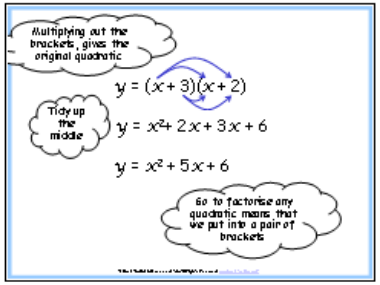
00:15 4



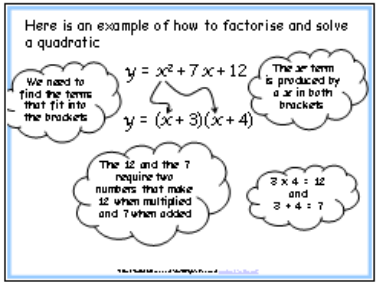
00:15 5



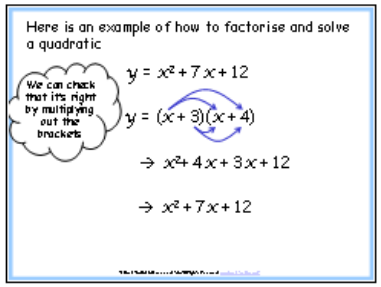
00:15 6



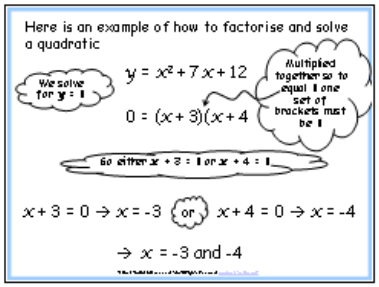
00:15 7



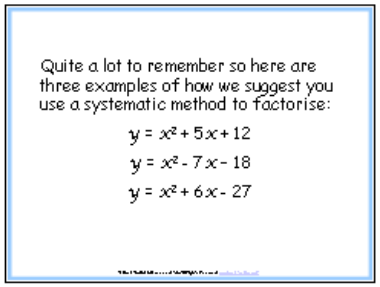
00:15 8



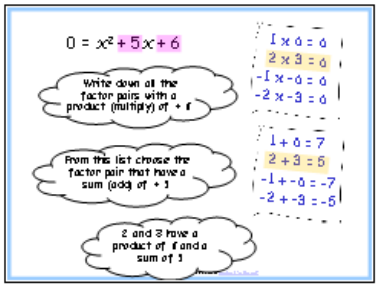
00:15 9



00:15 10

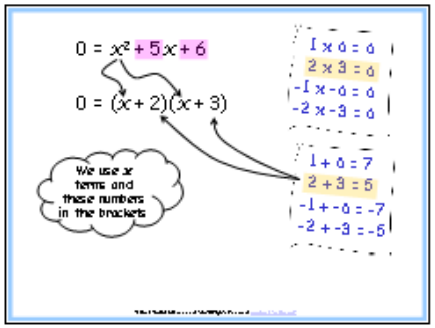


00:15 11

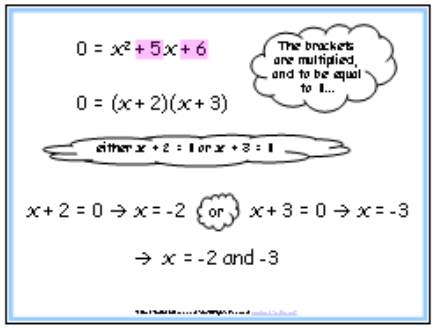


00:15 12

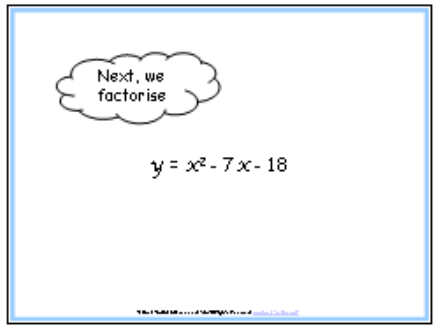
Continued…



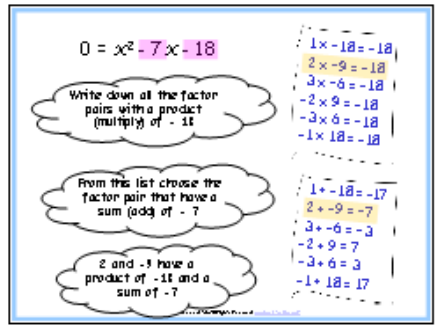
00:15 13



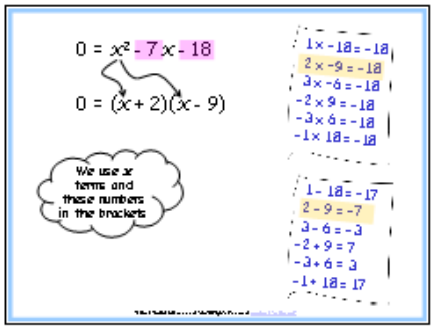
00:15 14



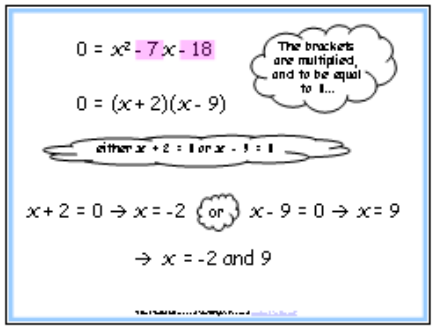
00:15 15



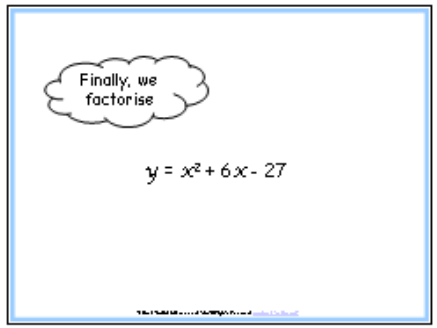
00:15 16



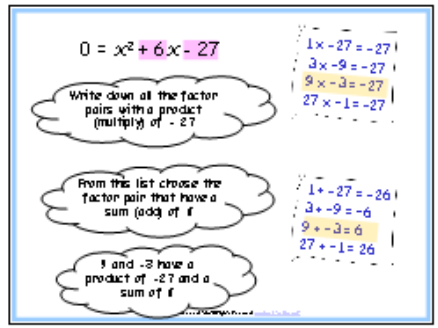
00:15 17



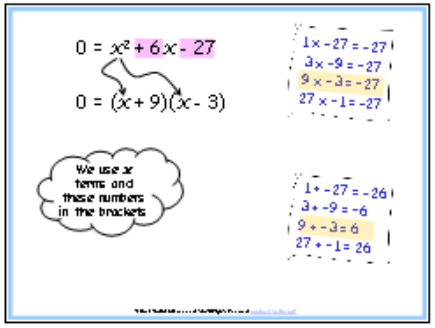
00:15 18



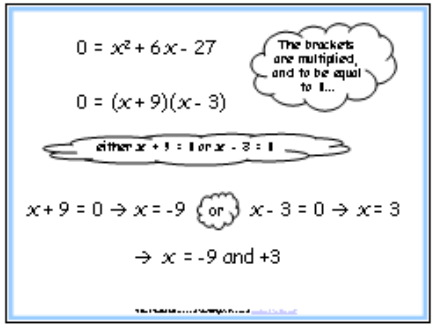
00:15 19



00:15 20



00:15 21



00:15 22

Factorise and solve these quadratics

1. $x^2 + 7x + 10 = 0$
2. $x^2 - x - 6 = 0$
3. $x^2 + 8x + 12 = 0$
4. $x^2 + x - 12 = 0$
5. $x^2 - 8x + 15 = 0$
6. $x^2 + 3x - 21 = 0$
7. $x^2 - 3x - 18 = 0$
8. $x^2 - 10x - 24 = 0$
9. $x^2 + 8x + 16 = 0$
10. $x^2 - 4x - 60 = 0$

23

Factorise and solve these quadratics

1. $x^2 + 7x + 10 = 0$ → $(x + 2)(x + 5)$ → -2 & -5
2. $x^2 - x - 6 = 0$ → $(x - 3)(x + 2)$ → 3 & -2
3. $x^2 + 8x + 12 = 0$ → $(x + 2)(x + 6)$ → -2 & -6
4. $x^2 + x - 12 = 0$ → $(x - 3)(x + 4)$ → 3 & -4
5. $x^2 - 8x + 15 = 0$ → $(x - 3)(x - 5)$ → 3 & 5
6. $x^2 + 3x - 21 = 0$ → $(x + 7)(x - 4)$ → -7 & 4
7. $x^2 - 3x - 18 = 0$ → $(x - 6)(x + 3)$ → 6 & -3
8. $x^2 - 10x - 24 = 0$ → $(x - 12)(x + 2)$ → 12 & -2
9. $x^2 + 8x + 16 = 0$ → $(x + 4)(x + 4)$ → -4 & -4
10. $x^2 - 4x - 60 = 0$ → $(x - 10)(x + 4)$ → 10 & -4

24