



# Quadratic Equation

\* for  $ax^2 + bx + c$  the zeroes are  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

## Simplify each radical

Ex1) a)  $\sqrt{4}$

b)  $\sqrt{18}$

c)  $\sqrt{100}$

d)  $\sqrt{15}$

e)  $\sqrt{-1}$

d)  $\sqrt{60}$

## Use the quadratic equation to solve

Ex2)  $f(x) = -x^2 + 3x - 2$

$a = \underline{\quad}$   $b = \underline{\quad}$   $c = \underline{\quad}$

Ex3)  $f(x) = 3x^2 + 8x + 4$

$a = \underline{\quad}$   $b = \underline{\quad}$   $c = \underline{\quad}$

Ex4)  $f(s) = 4s^2 - 9s + 5$

$a = \underline{\quad}$   $b = \underline{\quad}$   $c = \underline{\quad}$

$$\text{Ex5) } g(h) = 4h^2 + 26h - 14$$

$$a = \underline{\quad} \quad b = \underline{\quad} \quad c = \underline{\quad}$$

$$\text{Ex6) } f(b) = 10b^2 - 35n + 15$$

$$a = \underline{\quad} \quad b = \underline{\quad} \quad c = \underline{\quad}$$

$$\text{Ex7) } f(x) = 2x^2 + 5x = -3$$

$$a = \underline{\quad} \quad b = \underline{\quad} \quad c = \underline{\quad}$$

$$\text{Ex7) } g(x) = -3x^2 - 13x - 4$$

$$a = \underline{\quad} \quad b = \underline{\quad} \quad c = \underline{\quad}$$

$$\text{Ex8) } f(x) = -8x^2 - 52x + 28$$

$$a = \underline{\quad} \quad b = \underline{\quad} \quad c = \underline{\quad}$$