

*NB: 'Exact' means as a root or fraction*

Question	Linear? Quadratic? L/Q	Does it factor? Show Workings	Answer
$x^2 - 2x - 8 = 0$			
$x^2 - 4x = 0$			
$-2x + 4 = 6$			
$\frac{1}{2x} = -2$			
$x^2 + 4x = 12$			
$(2x - 1)(x + 3) = 0$			
$4 - 2x = 5 + 3x$			
$\frac{x}{2} = \frac{3x}{4}$			
$x^2 - 25 = 0$			
Complete the square $x^2 - 2x - 12$			
$x^2 + 6x - 8 = 0$	2 Decimal places		
$9x^2 - 64 = 0$	fraction		
$4x^2 + x - 3 = 0$			
$4x - 1 = 3$			
$5x^2 - 4x + 12 = 0$	1 Decimal place		

$3x = 6$			
$2x = \frac{8}{x}$			
$2x^2 + 5x = 12$			
$2x + y = 7$ $3x + 3y = 15$			
$x^2 - x - 12 = 0$			
$3(1 - x) = -4 + 4x$			
$5x = 3x$			
$x^2 - 6 = 0$	Exact answer		
$4x^2 - 6x - 9 = 0$			
$3x - x^2$			
$2x^2 + x - 10 = 0$	1 Decimal place		
$x(3x - 1) = 0$			
Complete the square $x^2 - 4x + 6$			
$3x - y = -2$ $x + 2y = 11$			
$3x^2 + 8x - 1 = 0$	2 Decimal places		

Answers			
Question	Linear? Quadratic? L/Q	Does it factor? Show Workings	Answer
$x^2 - 2 - 8 = 0$			$x = -2$ $x = 4$
$x^2 - 4x = 0$			$x = 4$ $x = 0$
$-2x + 4 = 6$			$x = -1$
$\frac{1}{2x} = -2$			$x = -1/4$
$x^2 + 4x = 12$			$x = 2$ $x = -6$
$(2x - 1)(x + 3) = 0$			$x = 1/2$ $x = -3$
$4 - 2x = 5 + 3x$			$x = 1$
$\frac{x}{2} = \frac{3x}{4}$			$x = 0$
$x^2 - 25 = 0$			$x = -5$ $x = 5$
Complete the square $x^2 - 2x - 12$			$(x - 1)^2 - 11$
$x^2 + 6x - 8 = 0$	2 Decimal places		$x = 1.12$ $x = -7.12$
$9x^2 - 64 = 0$	fraction		$x = \pm \frac{8}{3}$
$4x^2 + x - 3 = 0$			$x = -1$ $x = 3/4$
$4x - 1 = 3$			$x = 1$
$5x^2 - 4x + 12 = 0$	1 Decimal place		No solutions

$3x = 6$			$x = 2$
$2x = \frac{8}{x}$			$x = -2$ $x = 2$
$2x^2 + 5x = 12$			$x = 3/2$ $x = -4$
$2x + y = 7$ $3x + 3y = 15$			$x = 2$ $y = 3$
$x^2 - x - 12 = 0$			$x = -3$ $x = 4$
$3(1 - x) = -4 + 4x$			$x = 1$
$5x = 3x$			$x = 0$
$x^2 - 6 = 0$	Exact answer		$x = \pm\sqrt{6}$
$4x^2 - 6x - 9 = 0$			$x =$ $x =$
$3x - x^2$			$x = 0$ $x = 3$
$2x^2 + x - 10 = 0$	1 Decimal place		$x = 2$ $x = -2.5$
$x(3x - 1) = 0$			$x = 0$ $x = 1/3$
Complete the square $x^2 - 4x + 6$			$(x - 2)^2 + 2$
$3x - y = -2$ $x + 2y = 11$			$x = 1$ $y = 5$
$3x^2 + 8x - 1 = 0$	2 Decimal places		$x = 2.79$ $x = 0.12$

LO - Be able to solve a range of linear and quadratic equations

Name \_\_\_\_\_

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