

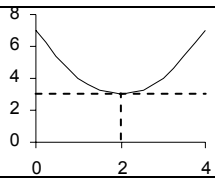
Algebra Wks1.6Alg – (Preparation for Differentiation)

Q	Write as Ax^b	Working	Answer in form Ax^b	Q	Write as Ax^b	Working	Answer in form Ax^b
1	$\sqrt{x}$			3	$\sqrt[5]{x}$		
2	$\frac{1}{\sqrt{x}}$			4	$\frac{2}{\sqrt[5]{x}}$		
Q	Write as Ax^b	Working		Answer in form Ax^b			
5	$\frac{\sqrt{x}}{\sqrt[5]{x}}$						
6	$\frac{\sqrt[4]{x^3}}{\sqrt[5]{x^2}}$						
7	$3\sqrt{x} \times \frac{2}{\sqrt[3]{x}}$						
8	$4\sqrt{x} \times \frac{2}{9\sqrt{x}}$						
9	$\frac{3}{4\sqrt[3]{x}} \times \frac{4}{9\sqrt[3]{x}}$						
10	$\frac{x}{4\sqrt[3]{x}} \times \frac{x\sqrt{x}}{9\sqrt[3]{x}}$						
	Write as $Ax^b + Cx^d$			Answer in form $Ax^b + Cx^d$			
11	$\frac{2+x}{\sqrt{x}}$						
12	$\frac{2 + \sqrt[3]{x}}{\sqrt{x}}$						
13	$(\sqrt{x} + 1)(\sqrt{x} - 1)$						
14	$(\sqrt{x} + \frac{1}{\sqrt[3]{x}})(\sqrt[3]{x} - \sqrt{x}) + x - 1$						

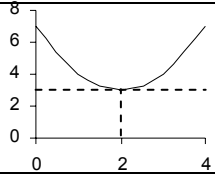
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Quadratic Functions and their Graphs - *Wks2.3aFun*

Question	Function	Min/ Max	Min/max value of $f(x)$	Occurs when $x = ?$	Sketch of graph
E.g.	$(x-2)^2+3$	min	+3	+2	
1	$(x+5)^2+5$				
2	$(x+2)^2-2$				
3	$4-(x-3)^2$				
4	$-2-(x+3)^2$				

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Series Introduction Worksheet - Wks6.1Seq

Fill in the Blanks in the Series	Starting Value (a)	Factor (× or + ?)	Number of Terms (n)	n th Term
1, 3, __, __, __, __.		+2		$2n - 1$
2, 4, 8, __, __, __.		×2		2^n
4, -6, 9, __, __.		×		
-46, -4, __, __.		+ __		$-46 + (n-1) \times 42$
__, __, __, __.				$360 \times \left(\frac{1}{2}\right)^{n-1}$
__, __, 20, 46, __.		+ __		
__, __, -5, __, 11.		+ __		
24, __, __, __, __, __.				$12n + 12$
101, 201, __.				$101 + (n-1) \times 100$
__, 50, 10, 2, __.		×		
__, __, 4, __, $\frac{4}{9}$.		×		

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