



# Decode the Maths Joke



## Substitution Into Expressions

Given that  $a = 8$ ,  $b = 3$ ,  $c = -4$  and  $d = 1.5$ , find the value of each expression for each of the letters of the alphabet.

<b>A</b>	$a + b$	11
<b>B</b>	$2a - b$	13
<b>C</b>	$3b + 7$	16
<b>D</b>	$a + b^2$	17
<b>E</b>	$a^2 - d$	62.5
<b>F</b>	$2b^2 - 3$	15
<b>G</b>	$10d - b^2$	6
<b>H</b>	$2ab$	48
<b>I</b>	$ab - 4$	20
<b>J</b>	$a + c$	4
<b>K</b>	$b + c + d$	0.5
<b>L</b>	$bc - 4$	-16
<b>M</b>	$a + c^2$	24

<b>N</b>	$a^2 \div 2$	32
<b>O</b>	$a - c$	12
<b>P</b>	$3cd + 20$	2
<b>Q</b>	$4c - 8$	-24
<b>R</b>	$5c^2 - 25$	55
<b>S</b>	$5 + \sqrt{2a}$	9
<b>T</b>	$\sqrt{b^2 + c^2}$	5
<b>U</b>	$c - b$	-7
<b>V</b>	$2a \div c$	-4
<b>W</b>	$c + 3b^2$	23
<b>X</b>	$c - 3d$	-8.5
<b>Y</b>	$c + \sqrt{4b - c}$	0
<b>Z</b>	$b^2 - 4ac$	137

Now decode the joke....

23	48	11	5		20	9		11		13	20	55	17
W	H	A	T		I	S		A		B	I	R	D

`	9		15	11	-4	12	-7	55	20	5	62.5		5
`	S		F	A	V	O	U	R	I	T	E		T

0	2	62.5		12	15		24	11	5	48	9	?	
Y	P	E		O	F		M	A	T	H	S	?	

12	23	-16	-	6	62.5	13	55	11	!
O	W	L	-	G	E	B	R	A	!