

Across Clues

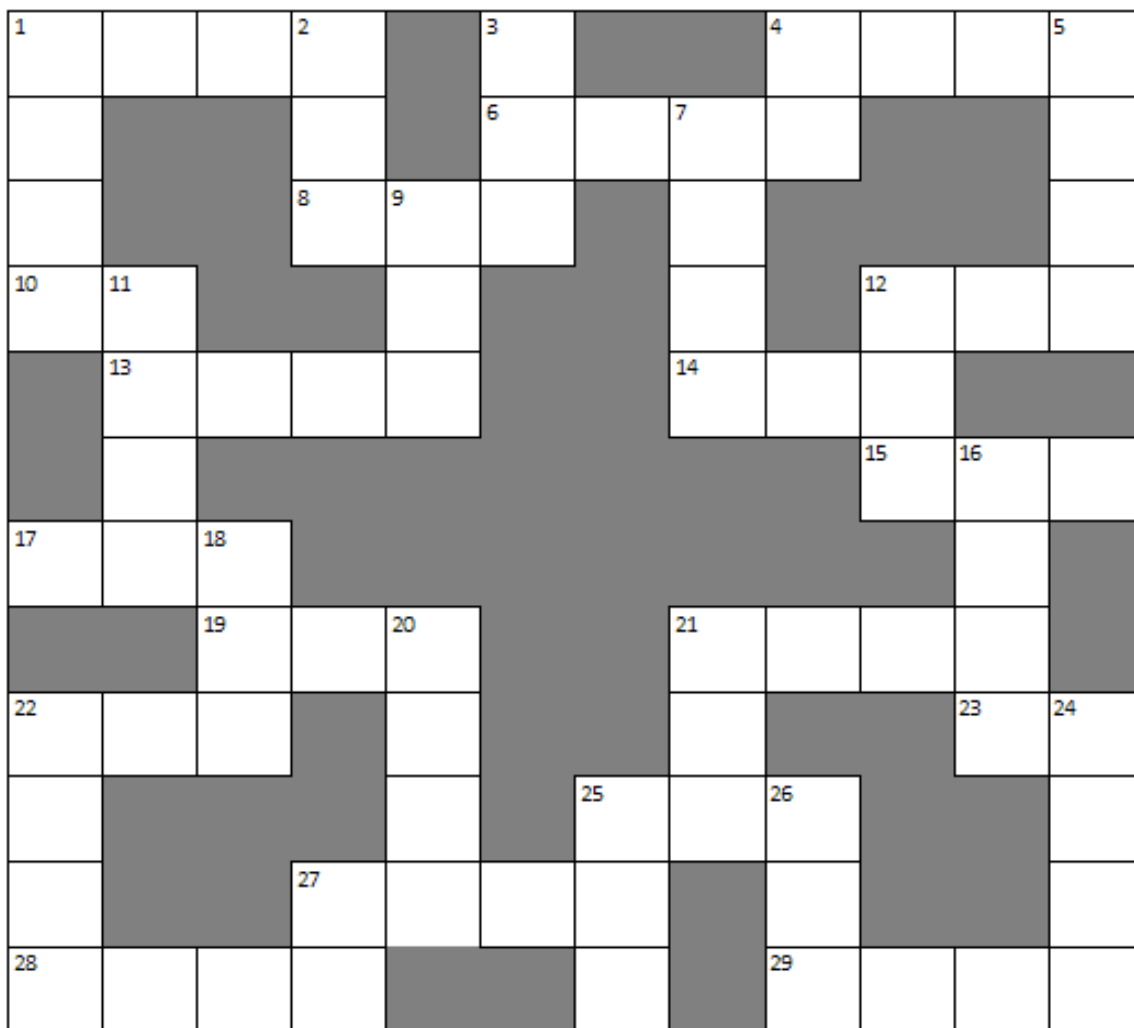
- 1 250 increased by 80%, then by 60% and then by 40%
- 4 Mean of 1 Across, 4 Across, 5 Down, 22 Down and 29 Across
- 6 Sum of 13 Across and 27 Across
- 8 Three more than one-sixth of 28 Across
- 10 The integer part of one-tenth of 26 Down
- 12 The sum of 19 Across and 18 Down
- 13 15 Across subtracted from half of 5 Down
- 14 The product of three and 25 Down
- 15 Five times the difference between the non-zero solutions of

$$x^5 + 96x^4 - 297x^3 = 0$$
- 17 Power of eight
- 19 One more than the difference between 1 Across and 17 Across
- 21 Power of four
- 22 A power of 245
- 23 Twice the cube root of 21 Across
- 25 Product of the solutions of $11x + 2y = 153$
 $17x - 3y = -62$
- 27 Nine multiplied by the difference between 3 Down and 27 Down
- 28 Rearrangement of the digits of 13 Across such that it has 521 as a factor.
- 29 Difference between 27 Across and 13 Across



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Down Clues

- 1 A square number
- 2 Seven less than seven-eighths of 1 Across
- 3 Interior angle of a regular decagon
- 4 Multiple of 11
- 5 $91^2 - 19$
- 7 Double 4 Across
- 9 Four away from a square number
- 11 Power of 11
- 12 Multiple of 143
- 16 4 Down plus twice 12 Down
- 18 Product of the solutions of
$$\begin{cases} 4x + 3y = 161 \\ 3x + 2y = 119 \end{cases}$$
- 20 The reverse of the difference between 29 Across and 21 Across
- 21 Twice 25 Down
- 22 Difference between 13 Across and 1 Across
- 24 Mean of 4 Across, 15 Across and 24 Down
- 25 A prime number
- 26 Power of eight
- 27 Only number which can be written as both x^y and also y^x where x and y are positive, distinct integers.



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Team Number.....

School / College Name

1			2		3		4			5
					6		7			
			8	9						
10	11							12		
	13						14			
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17		18								
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22									23	24
						25		26		
			27							
28								29		

Total (9)
Total (7)
Total (6)
Total (7)
Total (7)
Total (4)
Total (4)
Total (7)
Total (7)
Total (6)
Total (7)
Total (9)

Total score = _____/80



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Further Mathematics Support Programme