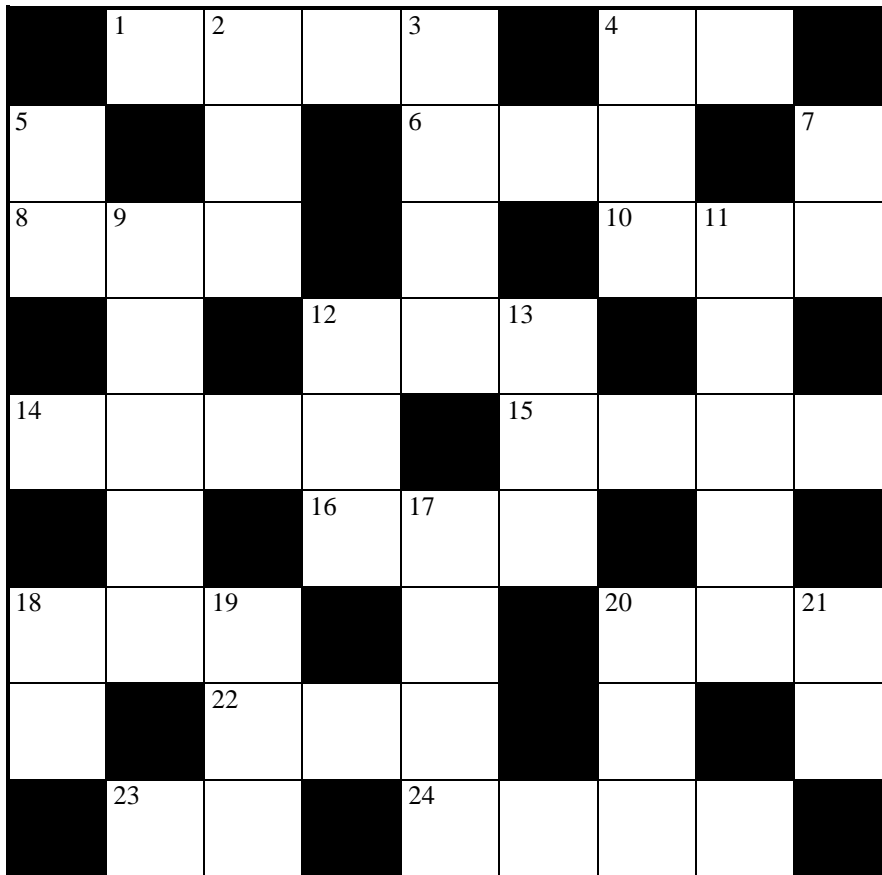


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National Final 2011 – Crossnumber

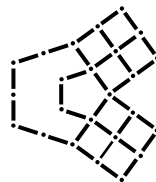


**Across**

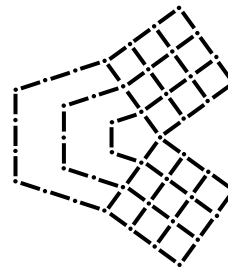
- 1 The largest prime factor of 87878 (4)
- 4 The square root of 3 Down (2)
- 6 (7 Down) percent of 20 Down (3)
- 8 The square of 7 Down (3)
- 10 A prime number (3)
- 12 A palindromic number which is the sum of five consecutive Fibonacci numbers (3)
- 14 The product of 6 Across and the square root of 2 Down (4)
- 15 The number of line segments in the thirtieth pattern in the sequence shown on the right (4)



11



33

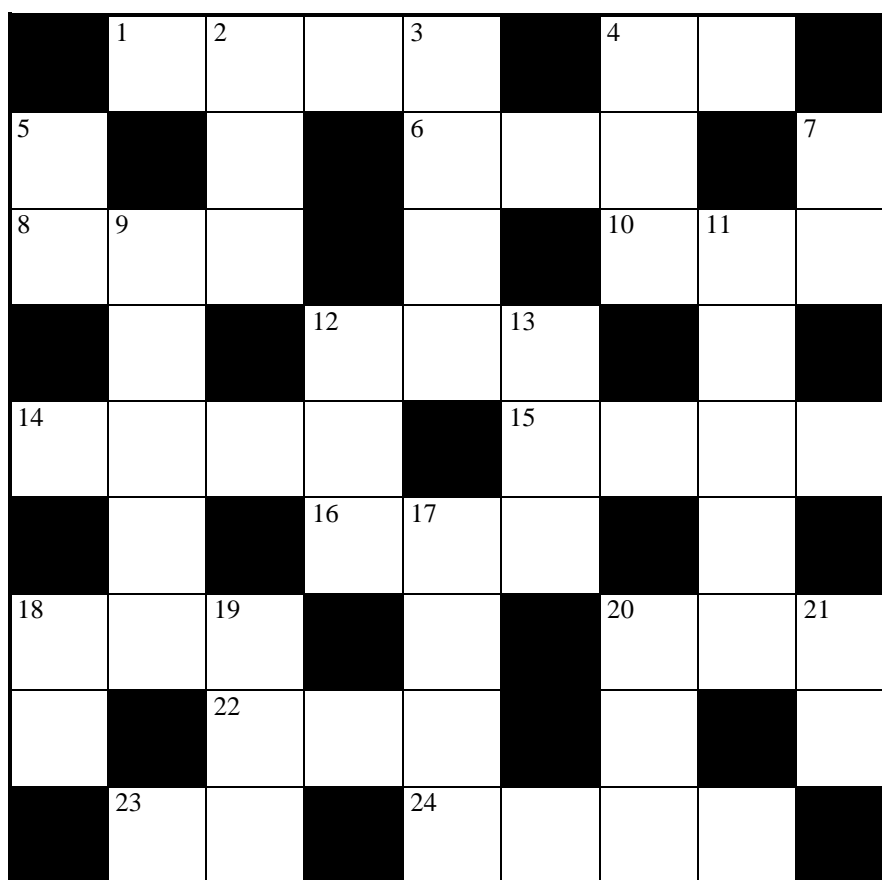


66

- 16 The perimeter of a rhombus whose area is 6000 and the lengths of whose diagonals are in the ratio 8 : 15 (3)
- 18 The sum of a square number and 18 Down (3)
- 20 A number with four factors (3)
- 22 (5 Down) percent less than 16 Across; a multiple of three (3)
- 23 Four less than a square number (2)
- 24 The lowest common multiple of 18 Down and 23 Across (4)

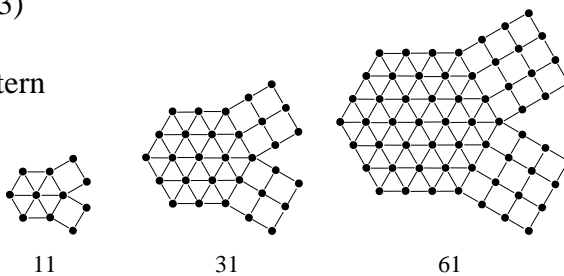


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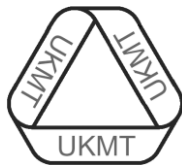


**Down**

- 2 A number with three factors (3)  
 3 A number whose digits are all prime (4)  
 4 An odd number (3)  
 5 A multiple of five (2)  
 7 The square root of 8 Across (2)  
 9 The largest prime factor of 76767 (5)  
 11 Twice a power of 9 (5)  
 12 The mean of 4 Down and 10 Across (3)  
 13 A multiple of 5 Down (3)  
 17 The number of dots in the thirtieth pattern in the sequence shown here (4)



- 18 The sum of two positive cube numbers; also the difference between two positive cube numbers (2)  
 19 One less than a power of two (3)  
 20 The sum of the interior angles of a polygon, in degrees (3)  
 21 The shortest side of a right-angled triangle whose longer sides are 4 Across and 23 Across (2)



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National Final 2011 – Crossnumber

Team Number.....

School Name .....

Answer		1	2		3		4			Marks (6)
Mark										
Answer	5				6				7	Marks (6)
Mark										
Answer	8	9					10	11		Marks (7)
Mark										
Answer				12		13				Marks (5)
Mark										
Answer	14					15				Marks (8)
Mark										
Answer				16	17					Marks (5)
Mark										
Answer	18		19				20		21	Marks (7)
Mark										
Answer			22							Marks (6)
Mark										
Answer		23			24					Marks (6)
Mark										

Total = \_\_\_\_\_ /56

+ 4

Score = \_\_\_\_\_