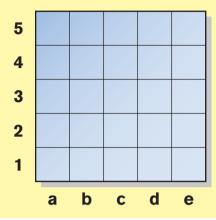# A square deal

Interpretation

Complete the magic square using the numbers 1 to 25 once each.
Each row, column and diagonal adds up to 65.
Each square is identified by its column and row:

Here are the clues:

Perfect squares are in b5, b3, d3, b1 and c1.
Prime numbers are in a5, c5, e5, c4, a3, c3, e3, e2 and a1.
Triangular numbers are in d5, e4, d3, a1, e1 and c2.
Perfect cubes are in d3 and b2.
Powers of 2 are in b5, b2, e2 and b1.
Palindromic numbers are in a5 and d1.
Factors of 100 are in b5, d5, c4, b3, d3, a2 and e2.
The median of all the numbers is in c3.
Numbers in row 3 and column c are all odd.
Numbers that are the same upside-down are in a5, d3 and b2.

This problem is taken from *Mathematical Pie* (Summer 2003), published three times a year for school pupils by the Mathematical Association (www.m-a.org.uk).

A square deal

Resource sheet

<table>
<tr><td></td><td></td><td>6</td></tr>
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<tr><td>4</td><td>9</td><td>6</td><td>15</td></tr>
<tr><td></td><td></td><td></td><td>1</td></tr>
<tr><td>11</td><td></td><td></td><td></td></tr>
<tr><td>5</td><td>16</td><td>3</td><td>10</td></tr>
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5				
4				
3				
2				
1				

a   b   c   d   e