## **Answer to D65 Triangle Totals**



All other correct answers are rotations or reflections of these.

## Notes

Pupils are most likely to use a 'trial and error' method to solve this problem. If they do, encourage them to think about what their unsuccessful attempts tell them and use logic to improve their next try. For example, if their efforts are producing totals that are always too high, they should think about the best numbers to put in the corners where they will be counted twice (ie the small ones).

The resources on the next page could be used by children if required.

A record sheet is also provided. This may be useful to some children.

D20 Add to 12 involves finding ways of adding three digits to make 12 on a 3 x 3 grid. It is a little harder than this one.

D21 Three Rings involves adding digits to make 15 in different ways. It is a little harder than this one.

D 22 Joins involves adding four numbers on a  $4 \times 4$  grid. It is harder than this one.

D33 Number Triangle involves adding pairs of corner numbers to make the middle number on each side of the triangle. D33 is harder than this one.

D49 Add to 12 + (Add to 15) is a similar problem to D20 but adding to 15. It is a little harder than this one.

D50 Three Rings + (Two Rings) is similar to D21 one but a little easier. It is, however, harder than this problem.

D68 Triangle Totals involves using the digits 1, 2 and 3 to make each side of a triangle add to 5. It is much easier than this one.

D69 Twelve in a Triangle involves using any digits to make each side of a triangle total 12. It is also much easier than this one.