

Non-Verbal Reasoning Worksheet Solutions

<http://www.drducanjames.co.uk/UPmaths>

Here are the answers to my non-verbal reasoning worksheets. In some rare cases there might be additional answers that can also work: However I am fairly certain I've anticipated all possible solutions.

The answers are always very strict: You have to focus on the things that are consistent. Some of the things on the diagrams/patterns/illustrations are "distractions" to be ignored. Beware of distractions!

Non-Verbal Reasoning

- (1) Add another line at the bottom.
- (2) Add another line at the bottom and leave it white.
- (3) Simply draw 6 circles but it doesn't matter whether any overlap or not.
- (4) Colour the box grey.
- (5) Each box adds another line. So, simply reproduce the previous box and add another line. I would make the third line also reach the centre as it feels right and fits the pattern of a set of three lines slowly reaching towards the same spot.
- (6) Shade the bottom-left box.
- (7) Shade all the boxes.
- (8) Reproduce the previous pattern and put a dot in the bottom-left corner of the bottom-left box.
- (9) Reproduce the previous pattern and put a dot in the bottom-left corner of the bottom-left box. (The dot goes in bottom-right, top-right, top-left and bottom-left corners progressively as pattern develops.)
- (10) The arrow still sits at the top. The shaded box is the bottom-left as it simply keeps changing between top-right and bottom-left. The dot goes in the top-left box as it is simply moving anti-clockwise. The triangle goes in the bottom-left box as it is simply moving clockwise.

Join the Club

- (1) The third shape is also a square so can join the club.
- (2) The second shape has the same number of triangles inside as it has sides (three) so can join the club.
- (3) The third shape has no corners so can join the club.
- (4) The fifth shape is the only one that also has an ellipse, circle and triangle crossing the edge of the rectangle so it can join the club.
- (5) The first shape is the only one with four sides so can join the club.
- (6) The fifth shape is the only one has a circle and a triangle crossing the edge of the rectangle so can join the club.

Matching Pairs

- (1) The second shape is the same but white inside and with a thin edge. This matches the example relationship.
- (2) The third shape has the same outside and the inside shape repeated five times. This matches the example relationship.
- (3) The fifth shape points the other way and has the opposite shading pattern. This matches the example relationship.
- (4) The second shape is a left-right mirror. This matches the example relationship.
- (5) I think this could be either the first or the third shape. Both are a 90 degree rotation. Either will match the example relationship.
- (6) The fourth shape has the same outside box and has each inner shape with one additional side (the triangle becomes a square, the squares become pentagons and the pentagon becomes a hexagon). This matches the example relationship.
- (7) The sixth shape has the opposite direction and the opposite colouring. This matches the example relationship.
- (8) The second shape is a left-right mirror with the dot missing. This matches the example relationship.

What Comes Next?

- (1) The shapes keep going from small to large. The shading keeps going from dark to white to striped. So, the next one is large and striped (the fourth option).
- (2) The triangle crosses, does not cross and then crosses the main shape. The arch crosses, is inside and then crosses the main shape. The circle is always crossing the main shape. The main shape is curved, angled and then curved. To continue each of these patterns requires the first option.
- (3) One box is being removed each time. The third option is the only one that continues this pattern.
- (4) The number of straight edges goes from 2 to 3 to 4. The second option is the only one that continues this pattern.
- (5) The number of circles goes from 3 to 4 to 5. There is always one cross. The third option is the only one that continues this pattern.