

Non-Verbal Reasoning Mock Test 1 Answers

Q#	Answer	Explanation
1	C	The trapezium is turned upside down - a half turn - and nothing else about it changes. The arrowhead must be turned a half turn too, staying black and staying the same size. A and B are quarter turns, D is the right turn but the wrong size, and E has changed colour as well.
2	A	The pentagon keeps its shape and size; only its shading changes, from black to white. So the white hexagon must become black. B is grey rather than black, C is the right colour idea but smaller, D has been turned and E has only changed its outline.
3	D	The triangle has been flipped over left to right, like a reflection in a mirror standing beside it. The trapezium must be flipped the same way. A is turned upside down instead, which is not the same as flipping it, and B is a quarter turn.
4	B	The triangle has been turned a quarter turn anticlockwise. The trapezium is turned the same quarter turn. A is a half turn, C is a three-quarter turn, and D is a reflection, which lands somewhere different again.
5	E	The star keeps its shape and shading but shrinks. The hexagon must shrink by the same amount. A has shrunk but nowhere near enough, and the other three have not changed size at all.
6	B	Nothing about the hexagon changes except its outline, which turns from a solid line into a dashed one. The kite must keep its shape and size and take a dashed outline. C and E have changed shading instead, and D has changed size.
7	A	The trapezium has been turned a quarter turn clockwise. Turning the pentagon the same way carries the small black dot round with it, from the bottom to the left. B and C are the other turns. D is a reflection, which leaves this pentagon looking exactly as it started, because the dot is already on the mirror line.

8	D	The triangle has been reflected in a mirror running from the bottom left corner to the top right. The arrowhead is reflected in the same slanting mirror. A uses the other diagonal, and B and C are turns rather than reflections.
9	C	Four of the shapes have four sides - a square, a rectangle, a rhombus and a trapezium. C is a pentagon and has five, so it is the odd one out.
10	B	Four of these are made of straight sides only. B is a circle, which is curved the whole way round and has no sides or corners at all.
11	D	The shapes are all different, so the shape is not what they share: four of them are filled in solid black. D is grey rather than black.
12	D	Four of the shapes contain exactly one black dot. D contains two, so it is the odd one out. The outer shape is different every time, so the shape itself cannot be what they have in common.
13	E	Four of the shapes are drawn with a dashed outline. E is drawn with a solid one, which is what makes it different.
14	C	Every shape is hatched and every one is at a different angle, so neither of those is the answer. Four of them are hexagons with six sides; C has only five, so it is a pentagon.
15	D	Four of the shapes are shaded over exactly half of themselves, the half being a different one each time. D is filled in completely, so it is the odd one out.
16	E	Each shape holds a smaller black shape inside it. In four of them both shapes are made of straight sides; in E both are circles, so E is the only one with any curve in it at all.
17	B	Each arrowhead is turned another eighth of a turn anticlockwise - 45 degrees every time. The last one shown is at 135 degrees, so the next must be at 180, pointing straight up. A has turned twice as far and D has turned the wrong way.

18	D	The pentagon grows by the same amount each time and nothing else about it changes. D carries on growing at that rate. A has grown twice as much as it should, B has shrunk instead, C has not grown at all and has only been turned, and E has kept its size and changed its outline.
19	E	The arrow flips between pointing right and pointing left, turning a half turn each time. The fourth arrow points left, so the fifth points right again. A and B are quarter turns and C has changed colour.
20	C	The square stays where it is and the black dot moves the same step to the right each time. C moves it one more step along. A moves it twice as far, B moves it back the way it came and D lifts it upwards as well.
21	A	The hexagon does not move or change size: its outline simply changes from solid to dashed and back again. The fourth is dashed, so the fifth is solid once more. The other four have changed shading or size instead and are all still dashed.
22	D	Each trapezium is turned a quarter turn anticlockwise, and the shaded half turns with it. D carries that on by another quarter turn. B turns too far, and E is a reflection, which leaves the shading on the wrong side.
23	C	The pentagon is turned a fifth of a turn each time, which carries the black dot round to the next corner. Because a pentagon looks the same after a fifth of a turn, the dot is the only way to see the turn happening at all. C shows the next step round.
24	B	The two shapes swap their shading each time: a black ring round a white middle, then a white ring round a black middle. The fourth is white outside, so the fifth is black outside with a white middle again.
25	A	The mirror stands upright beside the triangle, so the reflection is the triangle flipped left to right: its upright side moves from the left to the right. B is turned upside down instead, which is not the same thing.

26	C	Reflecting in an upright mirror swaps left and right, so the sloping side moves to the other end and the shape keeps the same way up. A is a half turn, which would turn the trapezium upside down as well.
27	B	This mirror lies flat underneath the shape, so the reflection is the arrowhead turned upside down with its shaded half staying on the same side. A reflects it left to right instead, which moves the shading across.
28	E	Both the triangle and the small dot are reflected, so the dot moves from the bottom left to the bottom right and the hatching leans the other way. A turns the whole thing upside down, which would carry the dot to the top.
29	D	The trapezium is leaning to one side, so the reflection leans the other way by the same amount, with the shaded half reflected too. E leans the right way but has been turned rather than reflected, so its shading ends up in the wrong place.
30	A	The mirror runs from the bottom left corner to the top right. A slanting mirror like this swaps the across and up directions over, so an arrow pointing down and to the right comes back pointing up and to the left. B uses the opposite diagonal, which would leave it pointing down and to the left instead.
31	C	The mirror runs from the top left corner down to the bottom right. The dot above the trapezium is carried round to the left of it, and the hatching is reflected with the shape. A uses the other diagonal, which would send the dot the other way.
32	B	Only the up-and-down direction is swapped, so the small black triangle moves from the top right to the bottom right - not across to the left. A moves it across instead, and C turns the whole picture round.
33	B	Along each row the shape is turned a quarter turn anticlockwise and keeps its shading. The trapezium in the bottom row must be turned a quarter turn on from the middle one. A is turned too far and C is a reflection.

34	D	Along each row the shading swaps between black and white, so the shapes go black, white, black. The bottom row needs a black star. A is grey rather than black and B is the right colour but the wrong size.
35	E	Each row turns its shape a half turn and then a half turn back, so the first and third shapes in a row are always the same. The bottom row therefore needs the triangle the same way up as it started.
36	A	The whole picture is turned a quarter turn anticlockwise along the row, carrying the black dot round with it. In the bottom row the dot has reached the left, so next it must be at the bottom. C and D are reflections, which put the dot in the right place but leave the shape facing the wrong way.
37	C	In each row the third picture is the first two put together: the outer shape from the first and the small black shape from the second. The bottom row needs the kite with the small black triangle inside it. A and B give only half of the answer each, D has taken its outer shape from the wrong row, and E has the two shadings the wrong way round.
38	D	Each shape is turned a quarter turn along the row and its shaded half turns with it. A is a reflection: it puts the shape the right way up but leaves the shading on the wrong side, which is the trap in this one.
39	E	Every row grows from left to right by the same amount, and the shading stays as it was. The bottom row needs the hatched octagon one step bigger again. A has grown twice as much as it should and B has shrunk.
40	B	In each row the third picture keeps only what the first two have in common. Both hold the same outer shape, so that stays; the dots are in different places, so both of them go. The bottom row needs the empty hexagon. A keeps both dots instead of dropping them.

41	C	Both squares have K at the top and the triangle has J, so the top letter stands for the shape: J is a triangle. Both white shapes have M at the bottom and the black one has N, so the bottom letter stands for the shading: N is black. The test shape is a black triangle, so its code is JN.
42	A	The two circles share P at the top and the pentagon has Q, so the top letter is the shape. The grey shape has X at the bottom and the white ones have Y, so the bottom letter is the shading. A grey pentagon is therefore QX.
43	D	The two hexagons take D and the two triangles take E, so the top letter is the shape - and turning a hexagon round does not stop it being a hexagon. Hatched shapes take S and plain white ones take R. The test shape is a hatched hexagon, so DS.
44	B	Both squares take L and the star takes M, so the top letter is the shape. Every shape here is black, so shading cannot be the bottom letter: the small shape takes T and the large ones take U, so it is the size. A small star is therefore MT.
45	E	The pentagons take G and the kite takes H, so the top letter is the outer shape. The shape holding a dot takes W and the empty ones take V, so the bottom letter says whether there is a dot inside. A kite with a dot is HW.
46	C	Hexagons take B and rhombuses take C, so the top letter is the shape. A dashed outline takes P and a solid one takes Q. The test shape is a dashed hexagon that has been turned a little, and turning it changes neither answer, so BP.
47	A	The top letter is the shape, R for a hexagon and S for a triangle. The bottom letter says how much is shaded: J for half shaded and K for completely shaded. Which half is shaded does not matter, so a hexagon shaded over its lower half is RJ.
48	D	The squares take X and the circle takes Y, so the top letter is the outer shape. The picture with one dot takes M and those with two take N, so the bottom letter counts the dots. A circle holding one dot is YM.