

Chapter 24 Geometry 3 Transformations – Constructions

1. I know that a **TRANSLATION** is a movement (slide) in a straight line and can construct translations of point A to image A' (A prime)

Q3 Q5 Q8 Page 483

2. I know that a figure will have an axis of symmetry if it can be reflected exactly in that line.
3. I can draw images of objects through **AXIAL** symmetry by marking lines at 90° from each point on the image through the axial symmetry line and then measuring from each point to the axial line and following through.

4. I can draw images of objects through **central symmetry in (a point) X**

Q1 Q3 Q6 Q10 Q11 Q13 Q14 Q17 Q20 Page 486**Constructions**

5. I can construct **the bisector of an angle using only a compass and straight edge**.
6. I can construct **the perpendicular bisector of a line segment**.
7. I can construct **a line perpendicular to a given line l, passing through a given point on l**
8. I can construct **a line perpendicular to a given line l, passing through a given point not on l**

9. I know how to **draw a line parallel to a given line, through a given point**

10. I can construct **the division of a line segment into three equal parts**

11. I can construct **the division of a line segment into any number of equal segments, without measuring it**

12. I can construct **the line segment of a given length on a given ray**

13. I can construct **an angle of a given number of degrees with a given ray as one arm**.

Q2 Q4 Q6 Q8 Q10 Q12 Q14 Q16 Q17 Page 496

14. I can construct a **triangle given the lengths of the three sides**

15. I can construct a **triangle given side, angle and side measurements**.

16. I can construct a **triangle given angle, side and angle measures**.

17. I can construct a **right angled triangle given the length of the hypotenuse and one other side**

18. I can construct a right angled triangle given one side and one of the acute angles

19. I can construct rectangles

Q1 Q3 Q5 Q7 Q9 Q11 Q13 Page 501