

Non-Calculator Part (continued)

4. A rectangle will be rotated 360° about a line which contains the point of intersection of its diagonals and is parallel to a side. What three-dimensional shape will be created as a result of the rotation?

- A. a cube
 B. a rectangular prism
 C. a cylinder
 D. a sphere

5. Line segment \overline{JK} in the coordinate plane has endpoints with coordinates $(-4, 11)$ and $(8, -1)$. Graph \overline{JK} and find two possible locations for point M so that M divides \overline{JK} into two parts with lengths in a ratio of 1:3.

To graph a line segment, select “segment JK” and then plot two points on the coordinate plane. A segment will connect the points. Select “Point M” and then plot the two points.

