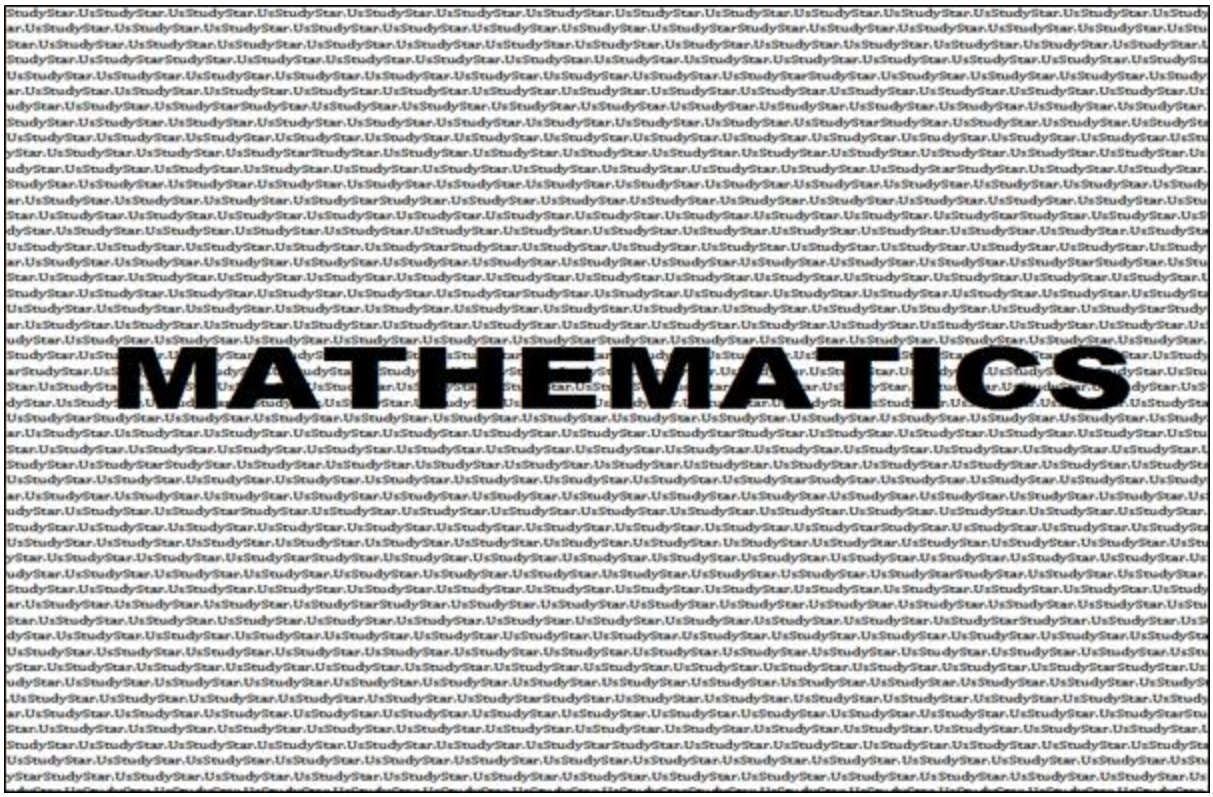

ANSWER SCHEME

Coordinate Geometry

Section A

1. M(-2, 2)
2. $M_{XY} = (2, 4)$
3. $x = -5$
4. $y = 2$
5. $Distance_{XY} = 5$ units
6. $x = -1$ or 7
7. $m = 3$
8. $m_2 = 4$
9. For points to be collinear then the gradient between any two points is the same
   Let A(4, 3), B(5, 5) and C(6,7)
   Then $m_{AB} = m_{AC} = m_{BC}$
   $m_{AB} = 2$, $m_{AC} = 2$
   Since $m_{AB} = m_{AC}$ then the points (4, 3), (5, 5) and (6, 7) are collinear.
10. $m = 2$

Section B

11. $m_{XM} = -\frac{1}{2}$
12. $m_{AC} = 2$
13. $2y = -x + 21$ ----------(BC)
14. $B\left(1\frac{2}{2}, 9\frac{2}{3}\right)$
15. W(5, 19)

A top student's secret tool