

Mathematic Sample Questions for Grade Division 3 (Grade 9 and 10) in ENGLISH

- Q-1** It is known that the difference between the cubes of the roots of the quadratic equation $ax^2 + bx + c = 0$ is **2011**. How many roots does the equation $ax^2 + 2bx + 4c = 0$ have?
- A** 0
B 1
C 2
D 4
- Q-2** It is known that $a + b + c = 5$ and $ab + bc + ac = 5$. What can $a^2 + b^2 + c^2$ be equal to?
- A** 5
B 10
C 15
D 25
- Q-3** Which number is greater: **31^{11} or 17^{14}** ?
- A** 31^{11}
B 17^{14}
C They are equal
D Undefined
- Q-4** The circle touches one of the sides of the angle at its vertex A and intersects the other side at point B. The angle is **40°** , M is a point on the smaller arc AB. Find the angle AMB
- A** 40°
B 80°
C 140°
D 160°
- Q-5** In a convex quadrilateral ABCD, points E, F, and G are the midpoints of sides AB, BC, and AD, respectively, with $GE \perp AB$, $GF \perp BC$. Find angle ACD.
- A** 30°
B 60°
C 90°
D 120°