

Worksheet: Applications of Integrals

IGCSE · Class 12 · Mathematics · 5 questions · 14 marks

Name: _____

Date: _____

Score: _____ / 14

Q1. Find the area bounded by $y = x^2 + 2$, the x-axis, $x = 0$, and $x = 3$. *[2 marks]*

Q2. Find the area of the ellipse $x^2/9 + y^2/4 = 1$ by integration. *[2 marks]*

Q3. Find the area bounded by $y^2 = x$ and $y = x$. *[3 marks]*

Q4. Find the area bounded by $y = \sin x$ and the x-axis from $x = 0$ to 2π . *[3 marks]*

Q5. Find the area between $y = 4 - x^2$ and $y = x^2 - 4$. *[4 marks]*
