# Worksheet: Integrals

Gujarat State Board · Class 12 · Mathematics · 8 questions · 33 marks

Name: _____ Date: _____ Score: _____ / 33

**Q1.** Find the anti derivative of cos 3x. *[2 marks]*

**Q2.** Integrate: 2x/(1+x^2). *[3 marks]*

**Q3.** Integrate: 1/sqrt(x^2+2x+2). *[4 marks]*

**Q4.** Integrate: x/[(x+1)(x+2)]. *[5 marks]*

**Q5.** Integrate: x log x. *[4 marks]*

**Q6.** Evaluate: integral from 0 to pi/4 of sin 2x dx. *[4 marks]*

**Q7.** Evaluate: integral from -pi/2 to pi/2 of sin^7 x dx. *[5 marks]*

**Q8.** Integrate: e^(2x) sin x. *[6 marks]*