Worksheet: Motion in a Plane

Gujarat State Board · Class 11 · Physics · 5 questions · 15 marks

Name: _____	Date: _____	Score: _____ / 15

Q1. A vector has components Ax = 3, Ay = 4. Find its magnitude and direction. *[2 marks]*

Q2. What are i.j and i x j? *[2 marks]*

Q3. A projectile is fired at 50 m/s at 30 degrees to the horizontal. Find T, H, and R (g = 10 m/s^2). *[5 marks]*

Q4. A stone is thrown horizontally at 20 m/s from 80 m height. Find its range (g = 10 m/s^2). *[3 marks]*

Q5. A particle moves in a circle of radius 20 cm at 5 revolutions per second. Find its speed and centripetal acceleration. *[3 marks]*