

School Name _____

SENIOR HIGH MATH LEAGUE

Bonus Question

I) Find the y-coordinate of the y-intercept for a line perpendicular to the line $3x - 2y = 6$ and going through the point (6, 6). (1 point)

Answer: _____

II) The average of 10 students on a particular exam is 85 but several students haven't taken the exam yet. If the students who need to take the exam take it and average 75 on the test thus lowering the class average to 80, how many students failed to take the exam the first time? (2 points)

Answer: _____

III) Two sailboats each traveling at a constant speed start out at the same port and travel on different but constant headings that vary from each other by 60 degrees. One, leaving an hour after the other one, is traveling 5 km/hour faster than the one that left first. Two hours after the first one left they are exactly 10 km apart. What is the speed to the nearest km/hour of the slower of the two sailboats? (2 points)

Answer: _____

Order of Finish: _____