Math 126 C - Autumn 2010
Mid-Term Exam Number One
October 26, 2010
Answers

There were two versions of the exam in use.

Version A - Problem 1 asks for the angle between $\langle 3, 4, -1\rangle$ and $\langle 5, 2, 8\rangle$.

1. 1.2608
2. $16x - 2y + \frac{15}{2}z - 89 = 0$
3. $\left(\frac{29}{9}, \frac{34}{9}, \frac{11}{9}\right)$
4. $\frac{2}{3}\left(26^{3/2} - 1\right)$
5. (a) One point is $\frac{\pi^2\sqrt{2}}{32}$ (b) At the point given in (a), the slope is $\frac{8+\pi}{8-\pi}$.

Version B - Problem 1 asks for the angle between $\langle 5, -2, 3\rangle$ and $\langle 3, 4, 7\rangle$.

1. 1.01453
2. $-10x - 3y - z + 60 = 0$
3. $\left(\frac{23}{2}, \frac{5}{4}, \frac{59}{4}\right)$
4. $\frac{4}{3}\left(17^{3/2} - 1\right)$
5. (a) One point is $\frac{\pi^2\sqrt{2}}{32}$ (b) At the point given in (a), the slope is $\frac{8+\pi}{8-\pi}$.