KFUPM/ Department of Mathematics & Statistics | ID # | Serial #
MATH 260-03/ Quiz 3a/ 131 | Name

1. [8pts] .The vectors $v_1 = (2, 0, -3)$, $v_2 = (4, -5, -6)$, $v_3 = (-2, 1, 3)$ are linearly dependent. Find a nontrivial linear combination of them that is equal to the zero vector.

2. [8pts] Determine whether $y_1 = x$ and $y_2 = x^2 |x|$ are linearly independent on $(-\infty, \infty)$.