

King Fahd University of Petroleum & Minerals
Department of Math and Stat
Math 132 Semester 141 - Quiz 4

Name _____ ID No. _____

1) Let $y = \frac{x^2}{x - 2}$

- (a) Determine all x - and y -intercepts.
- (b) Determine equations of all asymptotes.
- (c) Determine y' and y'' .
- (d) Determine intervals on which the function is increasing; determine intervals on which the function is decreasing.
- (e) Determine the coordinates of all relative maximum and relative minimum points.
- (f) Determine intervals on which the function is concave up; determine intervals on which the function is concave down.
- (g) Determine the coordinates of all inflection points.
- (h) With the aid of the information obtained in parts (a) - (g), give a reasonable sketch of the curve.