

King Fahd University of Petroleum and Minerals
Mathematical Sciences Department
Math 001-Quiz # 1 (061)

Student's Name:..... **ID:** **.SEC:**

Q1) Which **one** of the following is an **irrational number**:

a) $\pi \div \frac{22}{7}$

b) $(0.\overline{136})^2$

c) $(\sqrt{2})(\sqrt{8})$

d) 0.23×10^{-400}

e) $\frac{3\pi}{2\pi}$

Q2) If $-3 < x < -1$, then write the expression $|3 + x| + |2 + 2x| + || - x ||$ without absolute value.

Q3) If $x < y$, then simplify $\left[(x^2 - 2xy + y^2) \right]^{\frac{1}{2}} + \left[(x - y)^3 \right]^{\frac{1}{3}}$

Q4) Simplify $\sqrt[4]{32} - \frac{2}{\sqrt[4]{8}}$