

**Math4010**  
**Number System Questions**

1. Are these positive, negative, or you can't tell? (P = positive number, N = negative number)

(a)  $P + N$

(b)  $P - N$

(c)  $N^2$

(d)  $N(P)(N)$

2. Are these even, odd or you can't tell? (O = odd number, E = even number)

(a)  $O^2$

(b)  $E + O$

(c)  $EE - OO$

(d)  $27(E)$

(e)  $O^{10}$

3. Are these rational, irrational, or you can't tell? (I = an irrational number, R = a rational number)

(a)  $I^2$

(b)  $R + I$

(c)  $I + I$

(d)  $I^0$

(e)  $I \cdot I^{-1}$

(f)  $RI$

4. Are these closer to 0, 1 or 2?

(a)  $\left(\frac{2}{3}\right)^3$

(b)  $\left(\frac{9}{4}\right)^{1/2}$

(c)  $0^0$

(d)  $\left(\frac{1}{2}\right)^{10}$

5. Simplify these, if possible. If not possible, then explain the reason.

(a)  $\frac{6}{0}$

(b)  $\frac{0}{5}$

(c)  $\frac{0}{0}$

(d)  $6^0$

(e)  $0^6$