

Math4010
Number System Questions

- (1) Are these positive, negative, or you can't tell? (P = positive #, N = negative #)
- (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 #, E = even #)
- (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 #, R = a rational #)
- (a) I^2
 - (b) $R + I$
 - (c) $I + I$
 - (d) I^0
 - (e) $I \cdot I^{-1}$
 - (f) $R(I)$

(4) Are these closer to 0, 1, or 2?

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

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

(c) 0^0

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

(5) Simplify these, if possible. If not possible, then state that.

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

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

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

(d) 6^0

(e) 0^6

(f) 0^0