KFUPM Math101 Quiz#5 Sec.#45

Name: Serial#:

**Q1.** If 
$$f(t) = t^3 - 8t^2 + 24t$$

When the particle slow down?

**16.** At noon, ship A is 150 km west of ship B. Ship A is sailing east at 35 km/h and ship B is sailing north at 25 km/h. How fast is the distance between the ships changing at 4:00 PM?

Q2. Find the limit  $\lim_{x\to 0} \frac{\sin 2x}{2x - \tan x}$