

More PRACTICE PROBLEMS

(1) $\frac{1}{3x^4 + 5x} (12x^3 + 5)$

(2) $5/4$

(3) dec $(-\infty, -1) \cup (3, \infty)$
inc $(-1, 3)$
HA $y=0$ NO VA

(4) 0

(5) $f(1) = 3$, $g(1) = \frac{7}{2}$, $f(1.08) \approx 3 + \frac{7}{2}(1.08)$

(6) $\lim_{x \rightarrow 0^+} \sin(x) \ln(x) = 0$ (We haven't covered this yet!)

(7) Min = 0 at $x = 0$
Max = 7 at $x = -1$

(8) 120 meters of fencing. The field is 30×20

(9) 30 ft/sec