

EXAM 3 REVIEW

<u>Page</u>	<u>Problem</u>
185	53, 57, 75, 84
192	9, 11, 27, 31, 37, 39
199	23, 32, 33, 39
211	16a,c,e, 23, 51, 55

Answers for even numbered problems:

#84. $y' = (3x + 4)/[2x(x+1)\ln 2]$

#32. a. $dx/dt = -2.5 \text{ ft/sec}$

b. $d\theta/dt = -3/20 \text{ rad/sec}$

#16. (a) $1 - 6x$ (c) $1 - x/2$ (e) $4^{1/3}[1 + x/4]$

Additional Problems

1. Evaluate: $\sin \left[\tan^{-1} \left(\frac{x}{\sqrt{x^2 + 1}} \right) \right]$

2. Evaluate: $\cos \left[\sin^{-1} \left(\frac{2y}{3} \right) \right]$

Answers:

1. $\sin(\alpha) = x/\sqrt{2x^2 + 1}$

2. $\cos(\alpha) = [\sqrt{9 - 4y^2}]/3$