

Test 1 – Suggested Review Problems – Even Answers

1.R.70] 2

1.PS.6]  $a = 3, b = 6$

2.5.40]  $y - 1 = 1/3 (x - 1)$

2.6.46]  $\theta = 30^\circ, \frac{dx}{dt} = \frac{200\pi}{3} \text{ ft/s} , \theta = 60^\circ, \frac{dx}{dt} = 200\pi \text{ ft/s} ,$   
 $\theta = 70^\circ, \frac{dx}{dt} \approx 427.43\pi \text{ ft/s}$

2.R.112]  $450\pi \text{ km/hr}$

3.5.22]  $1/3$

3.5.30] 3

3.R.24] Point of Inflection: (0,-16). Curve is concave down for  $x < 0$  and concave up for  $x > 0$ .