

**Answers to AP Review 3**

25. (b) 5.05                      (c)  $y = 5e^{\frac{x^2}{2}}$  so  $f(0.2) = 5e^{0.02}$  (or 5.101)

26. C                      27. E                      28. D

29. (a)  $y - 2 = -3(x - 0)$

(b) No, we don't know if  $f''$  changes sign at  $x = 0$ .

(c)  $y = 4$

(d)  $g'(0) = 0$  and  $g''(0) = -9$  so  $g$  has a local maximum at  $x = 0$  by the Second

Derivative Test.

30. A                      31. D                      32. E                      33. C