

## Problem Set 68

2.  $h(t) = -16t^2 + 400$

4. Odd

6. Even

8. Even

10.  $\frac{2x^2}{2!} - \frac{2^3 x^4}{4!} + \frac{2^5 x^6}{6!} - \frac{2^7 x^8}{8!} + \dots$

12.  $3 \left[ \frac{1}{\sqrt{1-9x^2}} - \sin^3(3x)\cos(3x) \right]$

14.  $\frac{1}{5}x^5 + \frac{1}{2}x^2 + C$

16.  $\frac{9}{2} \text{units}^2$

18. max: 4.061      min: -8.209

20. A = 10      B = -5

22.  $f^{-1}(2) = 1$

24.  $y = e^{x \ln 2}$  or  $y = e^{\ln 2^x}$