

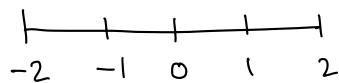
Math 1121

Homework #11

Section 7.3 #9abd/13abd, 25/29

Section 7.6 #6ab/9ab, 32/36

7.3 #9/13



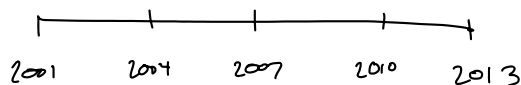
$\Delta x = 1$

a $1 (f(-2) + f(-1) + f(0) + f(1))$
 $= e^{-2} + 1 + e^{-1} + 1 + e^0 + 1 + e^1 + 1$

b $e^{-1} + 1 + e^0 + 1 + e^1 + 1 + e^2 + 1$

d $e^{-1.5} + 1 + e^{-.5} + 1 + e^{.5} + 1 + e^{1.5} + 1$

7.3 #25/39



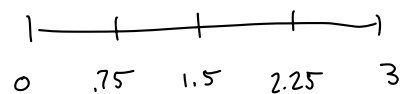
$\Delta x = 3$

left: $3 (f(2001) + f(2004) + f(2007) + f(2010))$
 $= 3 (70 + 142 + 341 + 923)$

right: $3 (142 + 341 + 923 + 1595)$

7.6 #6ab/9ab

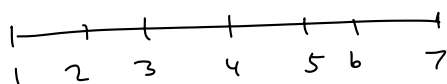
$$\int_0^3 2x^3 + 1 \, dx$$



a $\frac{3-0}{4} \left(\frac{1}{2}(2 \cdot 0^3 + 1) + 2 \cdot .75^3 + 1 + 2 \cdot 1.5^3 + 1 + 2 \cdot 2.25^3 + 1 + \frac{1}{2}(2 \cdot 3^3 + 1) \right)$

b $\frac{3-0}{3 \cdot 4} \left(2 \cdot 0^3 + 1 + 4(2 \cdot .75^3 + 1) + 2(2 \cdot 1.5^3 + 1) + 4(2 \cdot 2.25^3 + 1) + 2 \cdot 3^3 + 1 \right)$

7.6 #32/36



$n=6$

a $\frac{7-1}{6} \left(\frac{1}{2} \cdot 12 + 16 + 18 + 21 + 24 + 27 + \frac{1}{2} \cdot 32 \right)$

b $\frac{7-1}{3 \cdot 6} \left(12 + 4 \cdot 16 + 2 \cdot 18 + 4 \cdot 21 + 2 \cdot 24 + 4 \cdot 27 + 32 \right)$