

AME 60611

Homework 3

Due: Friday 9 September 2011, in class

1. Kaplan, p. 628: 2a,c; plot  $y(x)$  for each.
2. Kaplan, p. 629: 9c.
3. Kaplan, p. 633: 6d; plot  $y(x)$  for  $x \in [-8, 8]$  if  $y(0) = 1, y'(0) = 0, y''(0) = 0, y'''(0) = 0$ .
4. Kaplan, p. 634: 9d; plot the real and imaginary parts of  $y(x)$  for  $x \in [-8, 8]$  if  $y(0) = 1, y'(0) = 0$ .
5. Course notes, 1.8.
6. Course notes, 1.12.
7. Course notes, 2.6.
8. Course notes, 2.9d; Plot instead graphs for  $y(\pi/2) = -1, 0, 1$  for  $x \in [-5, 5]$ .
9. Course notes, 3.11.
10. Course notes, 3.13.