

## **HOMEWORK #26 (M427K FALL 2004)**

Expand the function

$$f(x) = x^3 + x^2$$

1. VALID ON THE INTERVAL  $-\pi$  TO  $\pi$  USING SINES AND COSINES

2. VALID ON THE INTERVAL 0 TO  $\pi$  USING ONLY SINES

hint: extend the function to an odd function

3. VALID ON THE INTERVAL  $\pi$  TO 0 USING ONLY COSINES

hint: “ “ “ even function