

## MATH 1042 TEST 3 REVIEW PROBLEMS – SUMMER 2009

**5.4:** 5, 29, 30

**5.6:** 33, 37, 41, 57, 63, 65, 67, 81, 86

**5.7:** 5, 6, 13, 17, 25

**6.1:** 7, 9, 11, 17, 37

**6.3:** 12, 13, 17, 21, 23, 26

**7.2:** 7, 11, 17, 25, 50

**7.3:** 2, 3, 9, 15, 17, 26, 32, 36

**7.4:** 4, 17, 27

**7.6:** 13, 15, 17, 28, 30

**7.7:** 7, 15, 36, 37, 43, 46

**10.2:** 16, 21, 24, 26, 33

**10.3:** 21, 25, 31, 36, 38, 55, 57, 63, 67, 71

**10.4:** 3, 7, 8, 11, 21, 25 (in 25, use the root test to test for absolute convergence)

**10.5:** 7, 9, 11, 13, 21, 22, 37, 43, 46, 48.

**10.6:** 4, 7, 10, 11, 13, 15, 20, 27, 29, 38, 40

**10.7:** 2, 4, 5, 7, 8, 9, 12, 15, 31, 37, 50, 52 (in 50, 52 express the integral as an infinite series only), 55. Find the first four terms in the Taylor series of  $f(x)=\sin x$  centered at  $x = \pi/6$ .