

## MATH 2043 TEST 1 REVIEW PROBLEMS – SUMMER 2009

**12.1:** 3, 5, 9, 11, 15, 17, 24, 29, 35, 40, 41, 46, 49, 51

**12.2:** 5, 10, 13, 19, 23, 27, 31 (in Problems 27 and 31 also find parametric equations of the line), 39

**12.3:** 1, 9, 13, 21, 25, 29, 41, 49 (be sure to know how to sketch  $\text{proj}_v(\mathbf{u})$ ), 60

**12.4:** 11, 19, 34, 41, 45, 47, 48

**12.5:** 3, 11, 15, 21, 26, 27, 31

**13.2:** 4, 15, 17, 34, 37, 41, 42, 49, 53

**13.3:** 3, 4, 9, 19 (in Problem 19, compute the length of the curve over the interval  $0 \leq t \leq \ln 2$ )

**13.5:** 3, 5, 18

**14.1:** 4, 7, 15, 32, 35, 37, 40, 44

**14.2:** 5, 13, 23, 34, 35

**14.3:** 2, 4, 14, 17, 28, 37, 40, 41, 42, 53, 55, 63, 68, 69