Chapter 2: Roman Numerals

Exercise 2

1. (a) If the Roman numerals M, D, C, L, V, X, I appear in descending order we add their values.

(b) The same symbol cannot be repeated more than 3 times together.

(c) V, L, and D are never subtracted.

2. (a) XIV = 10 + 4 = 14

(b) CCXXI = 100 + 100 + 20 + 1 = 221

(c) DCL = 500 + 100 + 50 = 650

(d) MCXL = 1000 + 100 + (50 – 10) = 1140

3. (a) 12 = XII (b) 42 = XLII (c) 28 = XXVIII (d) 39 = XXXIX

(e) 18 = XVIII (f) LXVI = 66 (g) 95 = XCV (h) 104 = CIV

(i) 407 = CDVII (j) 517 = DXVII (k) 1434 = MCDXXXIV (l) 2048 = MMXLVIII

(m) 1386 = MCCCLXXXVI (n) 1576 = MDLXXVI (o) 1935 = MCMXXXV

4. (a) XV = 15 (b) XIX = 19 (c) XIII = 13 (d) XVII = 17

(e) XXIX = 29 (f) XXXI = 31 (g) XLV = 45 (h) XXV = 25

(i) XLI = 41 (j) CCXII = 212 (k) LXXX = 80 (l) LII = 52

(m) CXLIV = 144 (n) LVI = 56 (o) LXX = 70 (p) XCV = 95

(q) LIX = 59 (r) LXXXIV = 84 (s) LXV = 65 (t) LXIX = 69

(u) CCLI = 251 (v) DXCI = 591 (w) CDIX = 409 (x) MMC = 2100

(y) MMCCX = 2210

5. (a), (c), (e), (g), (h) are meaningless

6. (a) 1608 = MDCVIII (b) 1884 = MDCCCLXXXIV (c) 1920 = MCMXX

7. (a) XVI April, MDCCCLIII = 16 April, 1853

(b) XVIII February, MCMXI = 18 February, 1911

(c) MCMLXXXIV = 1984

8. (a) LVIII + XIX = 58 + 19 = 77 = LXXVII

(b) CXCV – CXXXVII = 195 – 137 = 58 = LVIII

(c) MDCL + L = 1650 + 50 = 1700 = MDCC

(d) MCMXL – CLX = 1940 – 160 = 1780 = MDCCLXXX

9. (a) CCL > CXCV (250 > 195)

(b) MMDCLVII > MMCDLIX (2657 > 2459)