

8 Year 7 Term 1 Week 8 Answers Last modified: January 13, 2012

8.1 Square and cube roots

E 8.1.1 (1) 6 ; (2) 3 ; (3) 10 ; (4) 5 ; (5) 6 ; (6) 2 ; (7) 24 ; (8) 5 ; (9) 12 ; (10) 4 ;

E 8.1.2. (1) 20 ; (2) 13 ; (3) 1 ; (4) 16 ; (5) 17 ; (6) 83 ;

8.2 Chapter Review

(1) a. 854 ; b. 235 ; c. 8543 ; d. 2348 ;

(2) a. Yes ; b. No ; c. No ; d. Yes ; e. Yes ;

(3) 0 ; (4) 121 ; (5). 4, 16, 36, 64, 100, 144, 196, 256 ;

(6) $15^2 = 225$; (7) 121 ; (8) 21, 28, 120 ; (9) 1, 1, 2, 3, 5, 8, (13, 21, 34,) 55, 89, 144 ;

(10) 68 [$13 + 21 + 34 = 68$] ; (11) 3 and 21 [$3 \times 21 = 63$] ; (12) 54 ; (13) 9th ;

(14) 1312, 1320, 1328, 1336 ;

(15) a. 1, 2, 4, 8, 16, 32 ;

b. 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84 ;

c. 1, 2, 3, 4, 6, 8, 9, 12, 24, 36, 72 ;

(16) a. 192 ; b. 36 ; c. 144 ; (17) a. 15 ; b. 7 ; c. 4 ;

(18) a. Prime, b. composite ; c. prime ; d. composite ;

(19) composite [$87 \div 3 = 29$] ;

(20) a. $5 + 11 = 16$; b. $11 + 13 = 24$; c. $17 + 19 = 36$ or $5 + 31 =$; d. $23 + 17 = 40$ $11 + 29, 3 + 37$;

(21) a. primes that differ by 2. (22) [3, 5]; [5, 7]; [11, 13] [29, 31] [41, 43];

(23) 97 ; (24) 15 ; (25) a. $2^2 \times 3^2$; b. 2^6 ; c. $2^2 \times 3 \times 13$; d. $2^4 \times 11^2$;

(26) a. 63 [$3 \times 3 \times 7 = 63$] ; b. 715 [$5 \times 11 \times 13 = 715$] ;

(27) a. 168 [$24 \times 7 = 168$] ; b. 1400 [$350 \times 4 = 1400$] ;

(28) a. 40 ; b. 3 ; c. 2 ; d. 11 ;

(29) 35 ; (30) 24 [$4^2 \times 6^2$] ;

8.3 Problem Solving

(1) a. Pen = \$28, book = \$40 ; b. Total = \$136 ;

(2) a. Beef cost \$5.75/kg ; Pork cost \$3.45/kg ; b. Total \$33.35 ;

(3) 200 more Chinese stamps ; (4) 768 girls ;