

4.1 Year 8 Term 1 Week 4 Answers (Last modified: January 13, 2012)

E 4.1.1 (1) \$3375 ; (2) \$307.20 ; (3) \$1250/month ; (4) \$87,000 ;

E 4.1.2 (1) a. $\frac{93}{100}$, b. $\frac{13}{20}$, c. $\frac{21}{400}$, d. $\frac{173}{200}$;

(2) a. $2\frac{11}{25}$, b. 15 , c. $1\frac{21}{40}$, d. $1\frac{1}{400}$;

(3) a. 0.64 , b. 2.64 , c. 0.132 , d. 0.3725 ;

(4) a. 36% , b. 212.5% , c. 883.3% or $883\frac{1}{3}$, d. 41.6%

(5) a. 8% , b. 102.5% , c. 15% , d. 1202% ;

E 4.1.3 (1) a. \$60 , b. 262.5 mL , c. 6.45 kg , d. 240 kg ;

(2) a. 16.6% , b. 48% , c. 75% , d. 3% ;

(3) a. \$1007 , b. 99 m , c. 47.88 kg , d. \$281.25 ;

(4) a. \$598.40 , b. \$797.30 , c. \$147 , d. 57.6 L ;

(5) a. 600 , b. 1920 , c. 60 , d. 70,000 ;

E 4.1.4 (1) 8 ; (2) \$472 ; (3) \$2464 ; (4) \$30,500; (5) 12.5% loss ; (6) a. \$47,775 , b. \$87.50 ;

(7) \$19200 ;

E 4.1.5 (1) \$5880 ; (2) $\$2499 \times 12 = \$29,988$; (3) 480 cm^2 ; (4) $20,500,000 \div 1.005 = 20,398,010$;

(5) 42.26% ;

E 4.2.1 (1) $5pq - 5p$; (2) $6d^3 - 12d^2$; (3) $9y$; (4) $8a - 3$; (5) $5a^5 - 6a^3 + 3a^2$; (6) $x^5y^5 - x^4y^4$;

(7) $8a^2b^3cd^3 - 16a^2b^5d$; (8) $12y^9 - 2y^8$; (9) $27n - 27n^2$; (10) $46p^2 - 16p$;

E 4.2.2 (1) $(36p+15)$ kg; (2) 23 kg ;

E 4.2.3 (1) $3a + 19$; (2) $4y - 29$; (3) $-3p + 44q$; (4) $x - 17$; (5) $7n + 15$; (6) $6x^2 - 16x + 8$;

E 4.2.4 (1) $24+9x$; (2) $\$(\frac{p+50}{13})$; (3) $\frac{mp+nq}{p+q}$;

E 4.3.1 (1) 53 cm ; (2) 1260 cm^2 [$\frac{1}{2} \times 45 \times 56$];

E 4.4.1 (1) $14a^2b + 4ab^2 - 18b^2$; (2) $12a^2 - 14ab + 10b^2$; (3) $6x^2 + 24x + 24$;

(4) $60a^2 + 35a - 60$; (5) $8x$;

E 4.4.2 (1) $2\frac{2}{3}x$ cm, $\frac{x^2}{3} \text{ cm}^2$; (2) $\frac{12}{s} + \frac{6}{s+4} = \frac{18s+48}{s^2+4s}$ hrs ; (3) $\$1.15p$ or $\frac{23}{20}p$; (4) 6% [$\frac{3 \times 69}{3450}$];

(5) \$2058.33 ;

E 4.4.3 (1) $u = 65 \text{ m}$, $v = 41.3 \text{ m}$; (2) a. $XY = 24 \text{ mm}$, $YZ = 10 \text{ mm}$; b. 204 mm^2 ; (3) 7.9 m ;

E 4.4.4 (1) \$14.06 ; (2) $\frac{16}{45}$; (3) 4 cm^2 ;