

2. a 5 b 0 c 18 d -2
 e -5 f -8 g -14 h -8
 i -10 j -20 k -25 l -25
 m -20 n -38 o -300 p -100
 q -26 r -26 s -14 t -60
 u -2 v -70 w -36 x -8

Chapter 4 - Exercise 3 (page 36)

1. a 10 b 18 c 9
 d 30 e 23 f 18
 2. a 17 b 23 c 12 d 19
 e 31 f 50 g 26 h 500
 i 40 j 8 k 8 l $1\frac{1}{2}$
 m 3 n 6 o 2 p -2
 q 2 r -8 s 0 t 40
 u -20 v -10 w -1.3 x 0
 3. a $7x$ b $16x$ c $8a$ d $20a$
 e $12p$ f $25w$ g $25h$ h $110m$
 i $4x$ j $-5x$ k 0 l $3d$
 m $-11w$ no $-9w$ o $4n$ p $-30q$

Chapter 4 - Exercise 4 (page 37)

1. a -12 b -30 c -16 d -64
 e -54 f -40 g -44 h -56
 i -45 j -28 k -80 l -100
 m -15 n -90 o -100 p -400
 2. a -3 b -5 c -7 d -5
 e -7 f -6 g -11 h -9
 i -1 j -19 k -9 l -20
 3. a 4 b -8 c -21 d -80
 e -6 f -12 g -8 h -40
 4. a 15 b -18 c -16
 d -7 e -30 f -45
 g -44 h -2 i -6
 5. a -8 b no c -8
 6. a -4 b -4 c -2 d -5
 e -9 f -5 g -7 h -14
 i -12 j -20 k -20 l -7
 m -1 n -3.5 o -7.5 p -0.5
 7. a 8 b 15 c 54 d 28
 e 48 f 25 g 13 h 80
 i 81 j 80 k 180 l 6000
 8. a 3 b 7 c 8 d 9
 e 5 f 4 g 6 h 40
 i 9 j 30 k 80 l 49
 9. a -4 b 8 c 60 d 10
 e -9 f 30 g 28 h 64
 i 7 j -42 k -90 l -200
 m 1 n 4 o 64 p 400
 q -1 r 16 s -1 t -1

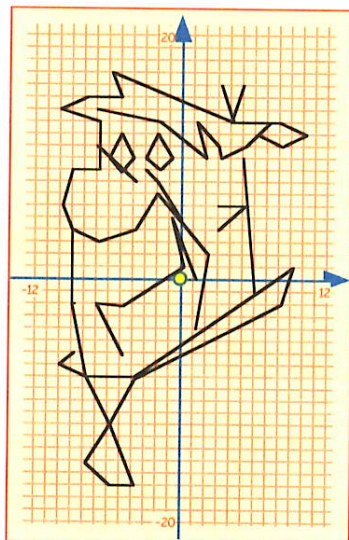
Chapter 4 - Exercise 5 (page 39)

1. a -3 b -10 c 8 d -30
 e 9 f -15 g 10 h 10
 i 0 j -40 k 1 l -9
 m -6 n -9 o -3 p 0
 2. a -4 b -9 c 60
 d 4 e 39 f -60
 3. a -10 b -24 c 14 d 80
 e -4 f -5 g 5 h 4
 i -30 j 10 k -6 l 0.5
 4. a 15 b 54 c 1
 d 3 e -1 f 0
 5. She ended up £14 overdrawn (-£14)
 6. a $(-30) \div 5 = -6^\circ\text{C}$ b $(-25) \div 5 = -5^\circ\text{C}$
 Swedish village 1°C warmer on average.

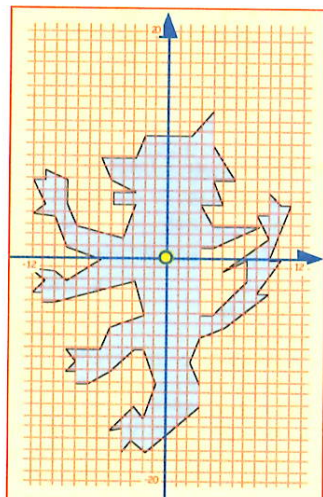
Answers to CHAPTER 5 (page 41)

Chapter 3 - Exercise 1 (page 23)

1. B(5, 3), C(3, -2), D(-4, -1), E(0, 3),
 F(-1, -3), G(-3, 0), H(5, -3), I(0, -2)
 2. a J(4, 4), K(-3, 3), L(-4, -2), M(-1, -2),
 N(3, -1), O(0, 0), P(6, -3), Q(0, -3),
 R(0, 2), S(-2, 0), T(-2, -1)
 b S c Q,R d S,T e T,N
 f S&T and R&Q g T&N, L&M, Q&P
 h J
 3. a See diagram
 4. a a kite b parallelogram
 c isosceles triangle d rhombus
 e pentagon f hexagon
 5. a see diagram b S(-3, -3) c $(1, -1\frac{1}{2})$
 6. a see diagram b (-5, -1)
 7. a A(1, 2), B(5, 2), C(5, 4)
 b A'(1, -2), B'(5, -2), C'(5, -4)
 c A''(-1, -2), B''(-5, -2), C''(-5, -4)
 8. a see diagram b trapezium
 c/d E(2, -1), F(3, -6), G(5, -6), H(6, -1)
 9. a see diagram
 b P(0, 1), Q(1, 6), R(4, 7), S(5, 2)
 c P''(0, -1), Q''(-1, -6), R''(-4, -7), S''(-5, -2)
 10/11/12. - see diagrams
 13.



14.



Answers to CHAPTER 6 (page 46)

Chapter 6 - Exercise 1 (page 46)

1. a £1.50 b £35 c £1.510
 d 320 kg e 315 kg f 16 kg
 g £4.80 h 1.2 cm i 7200 km
 j £250000 k 12.4 ml l 70 cm
 m £16 n 15 mm o 25p
 2. a £2.20 b £9 c 960p
 d 240 m e 63 ml f 900 mm
 g 5500 g h £144 i 36000 kg
 j £200 k £46 l \$891
 m 43 ml n £7.50 o 40 km
 3. a 90% b 324
 4. a £24 b £96 c £21
 5. £22.50
 6. £16.40
 7. a 160 b 240, 360, 120, 80
 8. 7700 km
 9. 444

Chapter 6 - Exercise 2 (page 48)

1. a £195 b 374.4 km c £14.14
 d 340.2 ml e 27 kg f 158.4 mm
 g £47.40 h 16.8 cm i 7200 km
 j 1.26 cm k 9.5 km l £57500
 m £808 n 187.5 km o £7.50
 2. a 336 b 688 c 1872
 d £5.40 e £428.40 f 80.04 kg
 3. a (i) 9.1 kg (ii) 60.9 kg b 2 hr 42 min
 4. a (i) £18 (ii) £138 b £16.02
 5. a 11040 ml b £2183
 6. £61.60 - £59.25 - Shop B better
 7. a £9600 b £16800
 8. 10%

Chapter 6 - Exercise 3 (page 50)

1. a 28% b 80%
 c, 60% d 45%
 2. a 0.2, 20% b 0.15, 15% c 0.8, 80%
 d 0.28, 28% e 0.58, 58% f 0.1, 10%
 3. a 20% b 20% c 60%
 d 20% e 30% f 40%
 4. a 75% b 80%
 5. a English - 75%, French - 80%, History - 78%
 b French c English
 6. a 80% b 60% c 48%
 d 64% e 85% f 70%
 g 90% h 75%
 7. a Lynda b Jane
 8. a $2X1-60\%$, $2X2-75\%$, $2X3-64\%$, $2X4-75\%$
 b $2X1-40\%$, $2X2-25\%$, $2X3-36\%$, $2X4-25\%$
 9. a 45%, 0.5, $\frac{40}{50}$
 b $\frac{19}{25}$, 77%, 0.8
 c $\frac{2}{13}$, $\frac{1}{6}$, 17%, 0.2
 10. a $33\frac{1}{3}\%$ of £540, 20% of 50% of £1560,
 $0.28 \times £520 - \frac{1}{9}$ of £297
 b half a % of 42000 - 65% of 320 -
 $0.85 \times 240 - \frac{2}{3}$ of 300
 11. £345.60
 12. various

Answers to CHAPTER 7 (page 54)

Chapter 7 - Exercise 1 (page 54)

1. a $2p$ b $3k$ c $5w$
 d x e $2y$ f h
 g $3p$ h $3k$ i 0
 j $3x+y$ k $2a$ l $g+2h$
 m m n $10x-1$ o $2a+5$