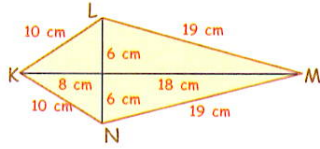


4. a

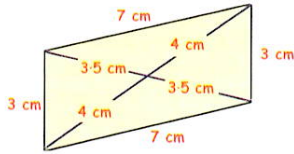


- b (i) KN (ii) ML (iii) ON  
(iv) NKO (v) KLO (vi) NMO

5. a Rhombus b Square  
6. 11 cm

**Chapter 10 - Exercise 5 (page 104)**

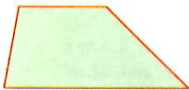
1. a no b yes c yes d no  
e yes f (i) yes (ii) no g 0  
h 2 i no j yes  
k no l no  
2. various  
3.



4. a rectangle (or square or rhombus)  
b rhombus (or square)  
c square

**Chapter 10 - Exercise 6 (page 105)**

1. square 2. rhombus  
3. parallelogram 4. kite  
5. rhombus 6. square  
7. kite 8. rhombus  
9. rectangle or parallelogram  
10. kite 11. square  
12. rhombus or parallelogram  
13. rhombus 14. kite  
15. square 16. rectangle  
17. square 18. rectangle  
19. kite 20. rectangle  
21. rhombus 22. kite  
23. parallelogram  
24. it has 1 pair of parallel sides



25. various

**Answers to CHAPTER 11 (Page 108)**

**Consolidation of Algebra Work (page 108)**

1. a 3 b 8 c 4  
2. a 5 b 6 c 30  
d 19 e 7 f 0  
g 9 h 5.1 i 55  
3. a - b x c ÷  
d + e ÷ f x  
g + h - i ÷  
4. a 14 b 25 c 9  
d 14 e 30 f 11  
5. a \* + 26 = 55 b 29 km  
6. a (i) 56 (ii) 14 b (i) 4 (ii) 35

**Chapter 11 - Exercise 1 (page 109)**

1. a (i) 5 (ii) 23 (iii) 53 (iv) 7.6 (v) 3  
b (i) 3 (ii) 12 (iii) 150 (iv) 3.3 (v) 9.4

2. a (i) 25 (ii) 34 (iii) 23.5 (iv) 118 (v) 0.4  
b (i) 6 (ii) 15 (iii) 12 (iv) 1.5 (v) 100  
3. a 44 b 27 c 21  
d 30 e 8 f 0  
g 41 h 12  
4. a 2 b 8  
c 14 d 9.5  
5. a 16 b 8 c 8  
d 3 e 12 f 48  
6. a 6 b x  
c 18 d ÷  
7. various e.g.  $100 \div 5 + 5 = 25$ ,  $100 - 95 \times 5 = 25$

**Chapter 11 - Exercise 2 (page 111)**

1. a 4 b 3 c 16  
d 10 e 9 f 22  
g 10 h 60 i 0  
j 18 k 15 l 80  
m 4 n 3 o 9  
p 35 q 3 r 0  
s 40 t 68 u 246  
2. a 2 b 5 c 6  
d 4 e 6 f 10  
g 12 h 6 i 12  
j 11 k 14 l 9  
m 11 n 8 o 3  
p 2.5 q 4.5 r 9.5  
s 2.5 t 1.5 u 5.5  
v 5.25 w 3.4 x 4.8

**Chapter 11 - Exercise 3 (page 112)**

1. a 3 b 4 c 5  
2. a 1 b 5 c 4  
d 8 e 5 f 9  
g 9 h 2 i 9  
j 10 k 3 l 7  
m 7 n 3 o 0  
p 20 q 1 r 2.5  
s 5 t 3.5 u 2.5  
3. a  $x + 8$  b (i)  $x + 8 = 21$  (ii)  $x = 13$   
4. a  $x + 8 = 17$  b  $x = 9$  (£9)  
5. a  $x - 7 = 14$  b  $x = 21$  (21 marbles)  
6. a (i)  $x + 14 = 31$  (ii)  $x = 17$   
b (i)  $y + 2.3 = 3.1$  (ii)  $y = 0.8$   
c (i)  $p + 20 = 34$  (ii)  $p = 14$   
7. a Area =  $4 \times x \times b$  (i)  $4x = 24$  (ii)  $x = 6$   
8. a 14 b 27 c 80  
d 50 e 50 f 16  
g 66 h 100 i 7  
j 10 k 18 l 12  
m 6 n 10 o 20

**Chapter 11 - Exercise 4 (page 114)**

1. a > b < c >  
d < e > f >  
g < h < i >  
2. a  $3 < 8$  b  $8 > 3$  c  $11 < 17$   
d  $-5 > -8$  e  $2 > -2$  f  $-1 < 5$   
g  $-15 < -14$  h  $-77 > -79$  i  $-10 < 9$   
3. a 3.4 b 0.1, 2.3 c 3.4  
d 0.1 e 1.2, 3.4 f 0.1, 2, 3, 4  
g -- h 0.1, 2, 3, 4 i 0  
4. a 2, 3 b -3, -2, -1 c -1, 0, 1, 2, 3  
d -3, -2, -1, 0, 1 e -2, -1, 0, 1, 2, 3 f -3, -2  
g -1, 0, 1, 2, 3 h -3, -2, -1, 0 i all  
5. a  $C \leq 14000$  b (i)  $Y \geq 18$  (ii)  $T < 18$   
c  $P \leq 51$  d  $V > 20$  e  $S \leq 12$   
f  $Y \geq 6$  g  $M \geq 40$  h  $P < 6$   
i  $M \geq 16$  j  $T > 220$  k  $x + y \geq 40$

**Chapter 11 - Exercise 5 (page 116)**

1. a  $x > 4$  b  $x > 9$  c  $x \leq 1$

- d  $x < 8$  e  $x \leq 9$  f  $x \geq 25$   
g  $x > 10$  h  $x < 70$  i  $x \leq 0$   
j  $x \geq 8$  k  $x < 1$  l  $x > 80$   
m  $x < 1.1$  n  $x > 210$  o  $x < 1/2$   
p  $x > 2$  q  $x \geq 7$  r  $x < 4$   
2. a  $x < 7$  b  $x > 5$  c  $x < 11$   
d  $x \geq 9$  e  $x \leq 7$  f  $x > 10$   
g  $x < 5$  h  $x \leq 10$  i  $x > 0$   
j  $x \geq 1$  k  $x < 3$  l  $x > 3$   
m  $x > 2.3$  n  $x \leq 10$  o  $x \geq 100$   
p  $x < 800$  q  $x > 250$  r  $x \leq 24$

3. a  $x + 120 < 190$ ,  $x < 70$   
b  $x + 400 > 775$ ,  $x > 375$   
c  $x - 10 > 35$ ,  $x > 45$   
d  $2x < 50$ ,  $x < 25$   
e  $2x > 60$ ,  $x > 30$   
4. a  $x < 4$  b  $x > 4$  c  $x < 0$   
d  $x \geq 8$  e  $x \leq 24$  f  $x > 11$   
g  $x \leq 1$  h  $x < 3$  i  $x > 6$   
j  $x \geq 6$  k  $x < 5$  l  $x \leq 11$   
m  $x \geq 3$  n  $x < 0$  o  $x \geq 2.5$   
p  $x \geq 30$  q  $x < 0$  r  $x \geq 50$   
5. a 4.5 b 1, 2, 3, 4 c 0.1, 2  
d 6.7 e 1, 2, 3 f -1, 0, 1, 2, 3  
g 1, 2, 3 h 2, 3, 4, 5, 6  
i 2, 3 j -2, -1, 0, 1, 2

**Answers to CHAPTER 12 (Page 119)**

**Consolidation of Fractions/Decimals and Percentages (page 119)**

1. a  $3/7$  b  $7/10$  c  $5/8$   
2. a  $4/7$  b  $3/10$  c  $3/8$   
3. a  $5/20$  b  $9/21$  c  $13/15$   
4. a  $2^{12}, 3/18$  b  $10/16, 15/24$  c  $6/20, 9/30$   
5. a  $1/3$  b  $3/4$  c  $2/3$   
6. a £9 b 50 m c \$12  
7. a 6 b 4 c £5.30  
8. a £18 b \$120 c £2100  
9. 40  
10. red 34%, blue 30%, green 14%, yellow 22%  
11. a  $21/100$  b  $39/100$  c  $11/100$  d  $37/100$   
e  $1/100$  f  $9/100$  g  $19/100$  h  $25/100$   
12. a 0.43 b 0.13 c 0.29 d 0.09  
e 0.05 f 0.50 g 1.25 h 0.01  
13. a  $17/100, 0.17$  b  $69/100, 0.69$   
c  $3/100, 0.03$  d  $30/100, 0.30$   
e  $70/100, 0.70$  f  $50/100, 0.50$   
g  $25/100, 0.25$  h  $10/100, 0.10$   
14. a 79% b 67% c 57% d 1%  
e 9% f 3% g 90% h 170%  
15. a 15p b 9mm c £7.50 d 70 cm  
e 250 g f £1.10 g 2.5 km h 27.5 cm  
16. a £616 b 612 km  
c £148.20 d 21p  
17. a (i) 12000 (ii) 3000 (iii) 5000  
b (i) 600 ft (ii) 900 ft

**Chapter 12 - Exercise 1 (page 121)**

1. a  $1/4$  b  $3/10$  c  $3/20$  d  $23/100$   
e  $1/50$  f  $9/100$  g  $19/20$  h  $3/4$   
i  $1/20$  j  $17/50$  k  $33/50$  l  $16/25$   
m  $2/5$  n  $3/5$  o  $4/5$  p  $27/100$   
2.  $40\% = 2/5$ ,  $50\% = 1/2$ ,  $5\% = 1/20$ ,  $75\% = 3/4$ ,  
 $10\% = 1/10$ ,  $1\% = 1/100$ ,  $100\% = 1$ ,  $25\% = 1/4$   
3. 1,  $3/4$ ,  $1/2$ ,  $1/4$ ,  $1/5$ ,  $1/10$ ,  $1/20$ ,  $1/100$