

1 Number Concepts 1

1.1 Number Language

- (a) 24 (b) 81 (c) 30 (d) 100 (e) 143 (f) 220 (g) 49
(h) 355 (i) 67 (j) 999 (k) 806 (l) 76 (m) 650 (n) 432
- (a) Twenty five (b) seventy nine (c) forty (d) ninety nine
(e) one hundred and thirty two (f) two hundred and fifty
(g) three hundred and seventy four (h) five hundred
(i) one hundred and eleven (j) nine hundred and seven
(k) seven hundred and twenty five (l) eight hundred and seventy
- 12, 39, 50, 75
- (a) 30, 50 (b) 10, 25 (c) 150, 250 (d) 120, 130
(e) 8, 10 (f) 60, 100 (g) 200, 400 (h) 80, 70

1.2 Ordering Numbers

- (a) 2, 4, 5, 8, 9 (b) 10, 12, 14, 17, 19 (c) 1, 7, 13, 15, 20
(d) 2, 6, 11, 16, 18 (e) 10, 30, 50, 70, 90 (f) 7, 12, 25, 32, 41
(g) 9, 31, 72, 84, 90 (h) 19, 35, 43, 52, 94
- (a) 20, 17, 12, 8, 5 (b) 72, 52, 29, 26, 13
(c) 65, 53, 45, 37, 11 (d) 84, 79, 39, 23, 17
- (i) largest (a) 100 (b) 92 (c) 29 (d) 32
(ii) smallest (a) 6 (b) 27 (c) 3 (d) 8
- (a) 7 tens (b) 7 (c) 7 hundreds (d) 7 tens
- £90, £53, £37, £30, £20, £12, £6, £2
- smallest (a) 358 (b) 179 (c) 288
largest (a) 853 (b) 971 (c) 882

1.3 Addition and Subtraction

- (a) 20 (b) 32 (c) 43 (d) 48 (e) 41 (f) 76
(g) 99 (h) 119 (i) 144 (j) 157 (k) 205 (l) 359
(m) 426 (n) 810 (o) 451

2. (a) 4 (b) 18 (c) 21 (d) 0 (e) 11 (f) 18
 (g) 5 (h) 33 (i) 30 (j) 43 (k) 49 (l) 115
 (m) 74 (n) 44 (o) 57

3. £1.00 (or 100p)

4. 75p, 25p

5. £1.50, 50p

6. 10p


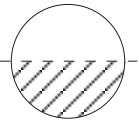
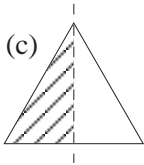
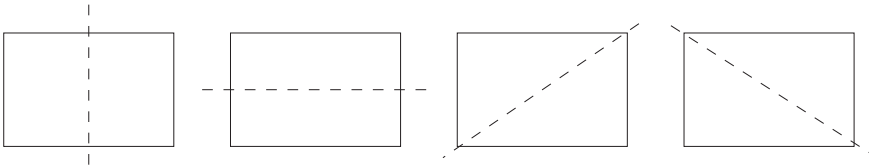

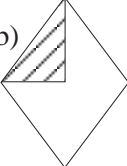
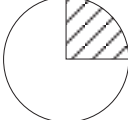
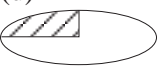
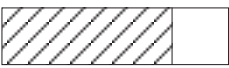

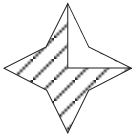
1.4 Comparing Numbers

1. (a) Skegness (b) Llandudno (c) 11 mm (d) 7 mm
 2. (a) Singapore (b) Moscow (c) 18 °C (d) 8 °C
 3. (a) Peter (b) Joan (c) Morag (d) 9 cm (e) 1 cm

1.5 Multiplication and Division

1. (a) 12 (b) 10 (c) 36 (d) 24 (e) 60 (f) 60
 (g) 30 (h) 20 (i) 9 (j) 200 (k) 20 (l) 90
2. (a) 4 (b) 6 (c) 5 (d) 3 (e) 5 (f) 20
 (g) 4 (h) 5 (i) 10 (j) 40 (k) 30 (l) 10
3. $5 \times £3 = £15$
4. $3 \times £4 + 2 \times £5 = £12 + £10 = £22$
5. $3 \times £12 = £36$
6. $3 \times 40p = 120p$ (or £1.20)
7. $99p \div 3 = 33p$
8. (a) $25 \times 8 = 200$ (b) 189
9. $20 - 15 = 5$
10. (a) 6 (b) 7 (c) 30 (d) 4 (e) 4
 (f) 3 (g) 20 (h) 2 (i) 14 (j) 5

1.6 Fractions: Halves and Quarters

1. (a)  (b)  (c) 
2. 
3. (a)  (b)  (c)  (d) 
4. (a) $\frac{1}{4}$ (b) $\frac{1}{2}$ (c) $\frac{3}{4}$ (d) $\frac{1}{2}$ (e) $\frac{3}{4}$ (f) $\frac{3}{4}$ (g) $\frac{1}{2}$
5. (a)  (b)  (c) 
6. (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{4}$
7. (a) 4 (b) 2 (c) 8 (d) 9
8. (a) 4 (b) 2 (c) $\frac{1}{4}$
9. 5

2 2-D and 3-D Shapes

2.1 Length

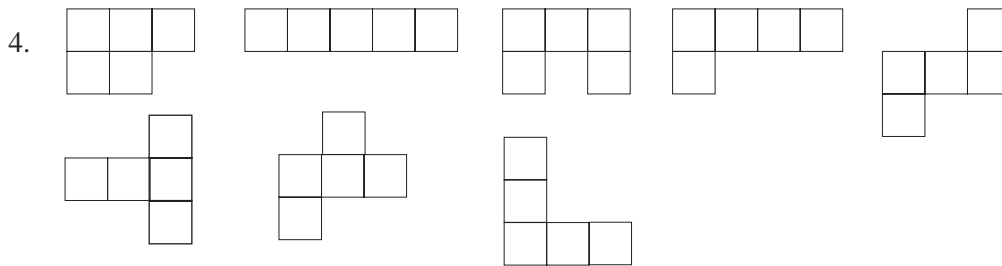
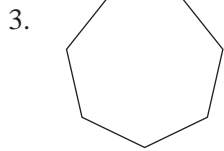
1. (a) D (b) C (c) B (d) E
2. (a) C (b) D
3. (a) B (b) D

2.2 2-D Shapes

1. (a) square (i) 4 (ii) 4 (b) circle (i) 1 (ii) 0
 (c) triangle (i) 3 (ii) 3 (d) rectangle (i) 4 (ii) 4
 (e) pentagon (i) 5 (ii) 5 (f) kite (i) 4 (ii) 4

- | | | | | | |
|----------------|-------|--------|-------------------|-------|--------|
| (g) hexagon | (i) 6 | (ii) 6 | (h) parallelogram | (i) 4 | (ii) 4 |
| (i) trapezium | (i) 4 | (ii) 4 | (j) octagon | (i) 8 | (ii) 8 |
| (k) semicircle | (i) 2 | (ii) 2 | | | |

2. (a) A (b) B (c) C (d) C (e) B

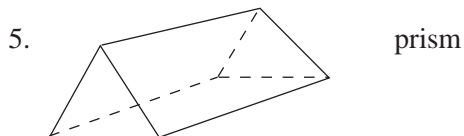
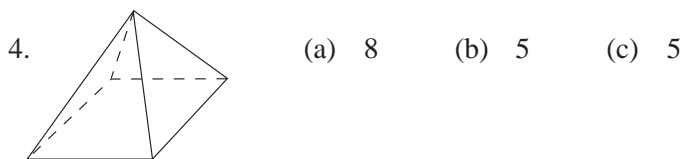


2.3 3-D Shapes

1. (a) cube (i) 12 (ii) 8 (iii) 6
 (b) pyramid (i) 6 (ii) 4 (iii) 4
 (c) diamond (i) 12 (ii) 6 (iii) 8

2. (a) cube 14, pyramid 8, diamond 14
 (b) 14, 8, 14
 (c) they are equal

3. (a) cylinder (b) cone (c) sphere



3 Data Analysis 1

3.1 Sorting and Classifying Objects

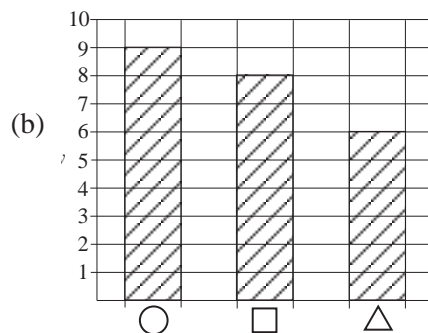
1. 3-sided shapes: B, D, G and 4-sided shapes: A, C, E, F
 2. even numbers: 4, 8, 12, 16 and odd numbers: 1, 7

3. e.g. flying transport: Helicopter, Aeroplane
 sea transport: Ship, Boat
 land transport: Walk, Train, Car, Bus
4. e.g. sports with a ball: Football, Tennis, Cricket, Rugby
 sports without a ball: Running, Swimming, Motor Racing
5. e.g. shapes with curved surfaces: A, C, E
 shapes with no curved surfaces: B, D, F
6. e.g. picture cards: Ace, Jack, King
 not picture cards: 4, 5, 9

3.2 Tabulating Information

1. (a)

Circle		9
Square		8
Triangle		6



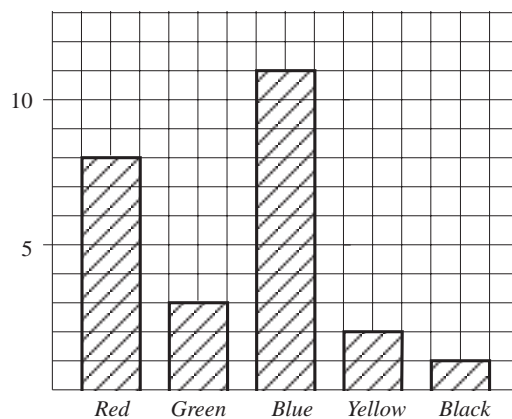
2.

<i>Frequency</i>		
0 goals		6
1 goal		2
2 goals		5
3 goals		0
4 goals		3
Total		16

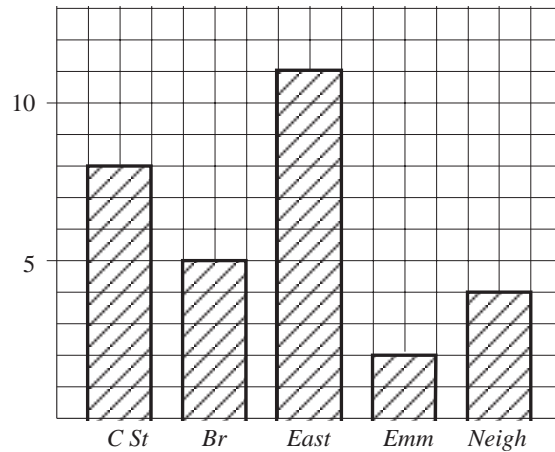


3.

Red	8
Green	3
Blue	11
Yellow	2
Black	1



4. Coronation Street 8
 Brookside 5
 Eastenders 11
 Emmerdale 2
 Neighbours 4



3.3 Reading Data

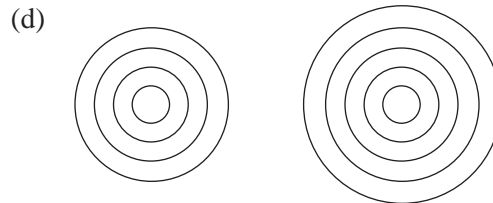
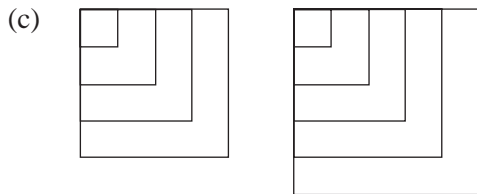
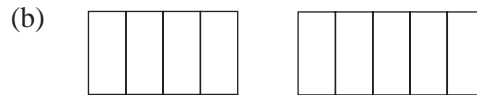
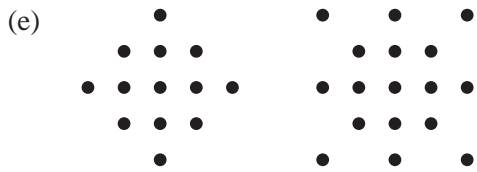
1. (a) (i) 4 (ii) 8 (iii) 5 (iv) 6 (b) Car
 (c) Train, Motorbike, etc. (d) 27
2. (a) Eastenders (b) 14 (c) 19
3. (a) (i) 7 (ii) 1 (b) 7 (c) 11 (d) 9 (e) 8

4 Number Patterns 1

4.1 Repeating Patterns

1. 7, 19, 77, 81
2. 34, 52, 98, 6, 16, 72
3. (a) 8 (b) 13, 7 (c) 10, 19 (d) 25, 30
 (e) 32, 52, 62 (f) 11
4. (a) 9, 11, 13 (b) 18, 22, 26 (c) 12, 10, 8 (d) 15, 18, 21
 (e) 50, 60, 70 (f) 25, 30, 35 (g) 32, 64, 128

5. (a) ● ● ● ● ● ● ● ● ●
- (b)
- (c)
- (d)



7. (a) 13, 21, 34, 55, 89 (b) In total, 13 (13th term is 233)

5 Algebra: Equations

5.1 Use of Symbols

1. (a) 2 (b) 3 (c) 5 (d) 12 (e) 6 (f) 5 (g) 5
 (h) 18 (i) 10 (j) 10 (k) 6 (l) 5 (m) 10 (n) 19

2.

<input type="checkbox"/>	<input type="radio"/>
0	2
1	3
2	4
3	5
4	6
5	7
6	8
7	9

3.

<input type="checkbox"/>	<input type="radio"/>
3	0
4	1
5	2
6	3
7	4
8	5
9	6

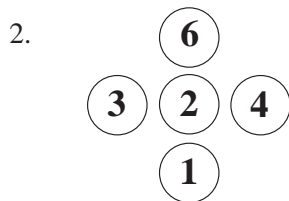
4.

○	□
9	4
8	3
7	2
6	1
5	0

6 Position

6.1 Describing Position

1. (a) A (b) A (c) F (d) F



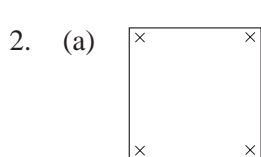
Note *This question was printed incorrectly. It should have started with the '2' in the centre circle.*

- 3.
- | | | |
|---|---|---|
| M | A | R |
| G | A | □ |
- (e) Bottom right hand square

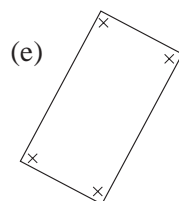
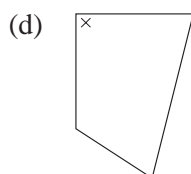
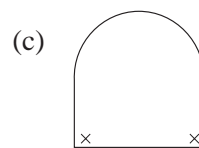
- 4.
- | | | | |
|------|--------|------|-----|
| John | Robert | Mark | Tom |
|------|--------|------|-----|

6.2 Turns

1. (a) $\frac{1}{2}$ turn, clockwise (b) $\frac{1}{2}$ turn, anticlockwise (c) $\frac{1}{4}$ turn, clockwise
 (d) $\frac{3}{4}$ turn, clockwise (e) $\frac{1}{2}$ turn, clockwise (f) full turn, clockwise
 (g) $\frac{3}{4}$ turn, anticlockwise (h) $\frac{1}{4}$ turn, anticlockwise (i) $\frac{3}{4}$ turn, clockwise



- (b) none



- (f) none

3. (a) 1 (b) 3 (c) 2 (d) 4 (e) 3 (f) 2

7 Measurement

7.1 Length

1. (a) cm (b) m (c) km (d) mm (e) m (f) cm
 2. (a) 2 m (b) 4 km (c) 5 cm (d) 7 m
 3. (a) 300 cm (b) 2000 m (c) 60 mm (d) 4000 mm

7.2 Mass

1. (a) kg (b) g (c) kg (d) g
 2. (a) 4 kg (b) $\frac{1}{2}$ kg (c) 3000 g (d) 2500 g

Miscellaneous Exercises

1. (a) 16 (b) 4
2. e.g. $11 + 4$, $12 + 3$
3. (a) $11 - 1$ or $13 - 3$, etc. (b) $14 - 2$ or $16 - 4$, etc.
4. £5, £6, £11
5. (a) 3 (b) 5 (c) 15 (d) 4
6.

4	6
10	

5	7
12	
7. (a) 10p, 5p, 5p, 5p, 2p (b) 17p
8. Four hundred and seventy nine
9. (a) £13 (b) £6
10. (a)

8	5	2
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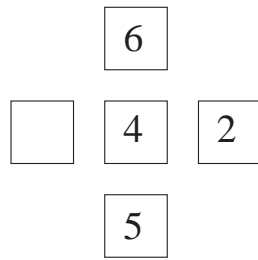
(b)

5	0	1
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(c)

8	2	0
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11. (a) Green (b) Red (c) Blue (d) Red and Black

12.

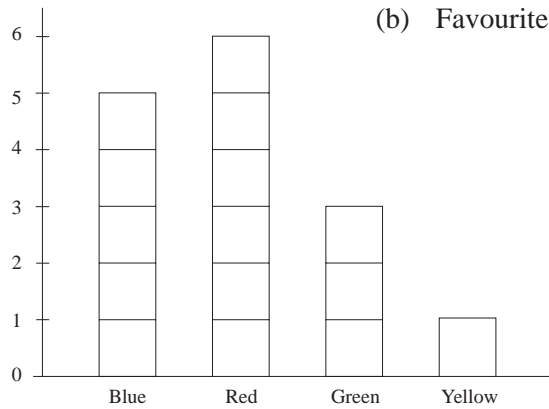


13. (a) clockwise (b) anticlockwise

14. (a) (i) square (ii) pentagon (b) cuboid

15. Set B, as it has 4 sides

16 (a) (b) Favourite colour (c) 15



17. e.g. Football, Netball, Rugby, Cricket, Hockey (team games)
 Running, Swimming, Long Jump (single competitors)

18. (a) 100 (b) 75 (c) Winter