

51 Block 4 Revision Booklet - Answers

NUMBER

Ex 1

1. a) 4 b) 9 c) 25 d) 49 e) 36 f) 81 g) 100
h) 144 i) 169 k) 225 l) 324 m) 400 n) 625
o) 900 p) 10000

2. a) 8 b) 27 c) 64 d) 216 e) 81 f) 625
g) 32 h) 64

3. 4, 9, 16, 25, 100

Ex 2

1. a) 3 b) 4 c) 6 d) 7 e) 9 f) 11

2. a) 2 b) 3 c) 5 d) 7 e) 10

Ex 3

1. a) 17 b) 59 c) 33 d) 54 e) 18
f) 4 h) 8 i) 3600 j) 28 k) 1

ALGEBRA

1. a) 33, 36, 39 b) 50, 46, 42
c) 45, 53, 61 d) 50, 25, 12.5
e) 22.4, 22.7, 23.0 f) 36, 49, 64
g) 10, 17, 24 h) 486, 1458, 4374

2. a) Start at 10kg, then add 5kg each time
b) 55kg

3. a) Start at 6, then add 6 4) 1, 1, 2, 3, 5, 8, 13, 21, 34,
b) 24 55, 89
c) 44

Ex 2

1.

(a)

Rectangles (R)	1	2	3	4	5	6	} 30
Matches (M)	8	13	18	23	28	33	} 153

(b) $M = 5R + 3$

2.

(a)

Parallelograms (P)	1	2	3	4	5	} 20
Matches (M)	4	7	10	13	16	} 61

(b) $M = 3P + 1$

3.

(a)

Rectangles (R)	1	2	3	4	5	6	30
Matches (M)	10	16	22	28	34	40	184

(b) $M = 6R + 4$

(c) $M = 6R + 4$
 $58 = 6R + 4$
 $6R = 54$
 $R = 9$

4.

(a)

Rectangles (R)	2	3	4	5	6	25
Stars (S)	2	4	6	8	10	48

(b) $S = 2R - 2$

(c) $S = 2R - 2$
 $78 = 2R - 2$
 $2R = 80$
 $R = 40$

5.

(a)

Shape (s)	1	2	3	4	5	13
Matches (m)	5	9	13	17	21	53

(b) $m = 4s + 1$

ALGEBRA Ex2 contd.

6.

(a)	Squares (s)	1	2	3	4	5	20
	Circles (c)	4	7	10	13	16	61

(b) $C = 3S + 1$

7.

(a)	Triangles (T)	1	2	3	4	5	25
	Matches (M)	3	5	7	9	11	51

(b) $M = 2T + 1$

(c) $M = 2T + 1$

$101 = 2T + 1$

$2T = 100$

$T = 50$

8.

(a)	Octagons (P)	1	2	3	4	5	6	20
	Matches (Q)	8	15	22	29	36	43	141

(b) $Q = 7P + 1$

(c) $Q = 7P + 1$

$106 = 7P + 1$

$7P = 105$

$P = 15$

9.

(a)	Triangles (T)	1	2	3	4	5	50
	Matches (M)	5	8	11	14	17	152

(b) $M = 3T + 2$

Exercise 3

- 1, 4, 9, 16, 25, 36, 49, 64, 81, 100
- 1, 3, 6, 10, 15, 21, 28, 36, 45, 55
- 100, 144, 225
- 66, 78, 91

FRACTIONS

Ex 1 1. a) $\frac{9}{15}$ b) $\frac{8}{28}$ c) $\frac{40}{48}$ d) $\frac{56}{63}$ e) $\frac{2}{3}$ f) $\frac{3}{7}$ g) $\frac{1}{2}$

2. a) $\frac{1}{2}$ b) $\frac{5}{6}$ c) $\frac{3}{8}$

Ex 2

1. a) $5\frac{1}{3}$ b) $8\frac{2}{5}$ c) $7\frac{7}{8}$ d) $7\frac{1}{2}$ e) $6\frac{2}{3}$ f) $12\frac{1}{5}$

2. a) $\frac{7}{2}$ b) $\frac{38}{5}$ c) $\frac{65}{6}$ d) $\frac{71}{9}$ e) $\frac{71}{12}$ f) $\frac{233}{15}$

3. a) $4\frac{4}{5}$ kg b) $3\frac{1}{6}$ litre c) 8 bags

Ex 3

1. a) 9 b) 4 c) 33 d) 72 e) 12.5 f) 36
g) 92 h) 208 i) 250 j) 54

Ex 4

1. a) $\frac{3}{5}$ b) $\frac{5}{7}$ c) $\frac{6}{8} = \frac{3}{4}$ d) $\frac{7}{10}$ e) $\frac{16}{20} = \frac{4}{5}$ f) $\frac{5}{9}$

g) $\frac{4}{6} = \frac{2}{3}$ h) $\frac{9}{13}$ i) $\frac{4}{11}$ j) $\frac{8}{15}$

Ex 5

1. a) $1\frac{3}{20}$ b) $\frac{3}{8}$ c) $1\frac{5}{21}$ d) $-\frac{1}{60}$ e) $\frac{29}{35}$ f) $\frac{5}{18}$

Fractions

Ex 5 cont'd

1. g) $1\frac{7}{15}$ h) $\frac{3}{20}$ i) $1\frac{5}{12}$ j) $\frac{19}{40}$ k) $1\frac{2}{9}$ l) $\frac{1}{12}$

m) $1\frac{23}{35}$ n) $\frac{11}{60}$ o) $\frac{46}{63}$ p) $\frac{1}{39}$ q) $1\frac{3}{20}$ r) $\frac{29}{70}$

s) $\frac{11}{84}$ t) $\frac{23}{36}$

Exercise 6

1. a) $5\frac{1}{6}$ b) $7\frac{13}{30}$ c) $1\frac{1}{3}$ d) $1\frac{1}{3}$ e) $4\frac{1}{4}$ f) $2\frac{1}{10}$

g) $6\frac{5}{8}$ h) $6\frac{3}{14}$ i) $4\frac{2}{9}$ j) $4\frac{5}{12}$ k) $1\frac{2}{15}$ l) $3\frac{1}{6}$

2. $\frac{13}{15}$ km

3. $5\frac{19}{20}$ kg