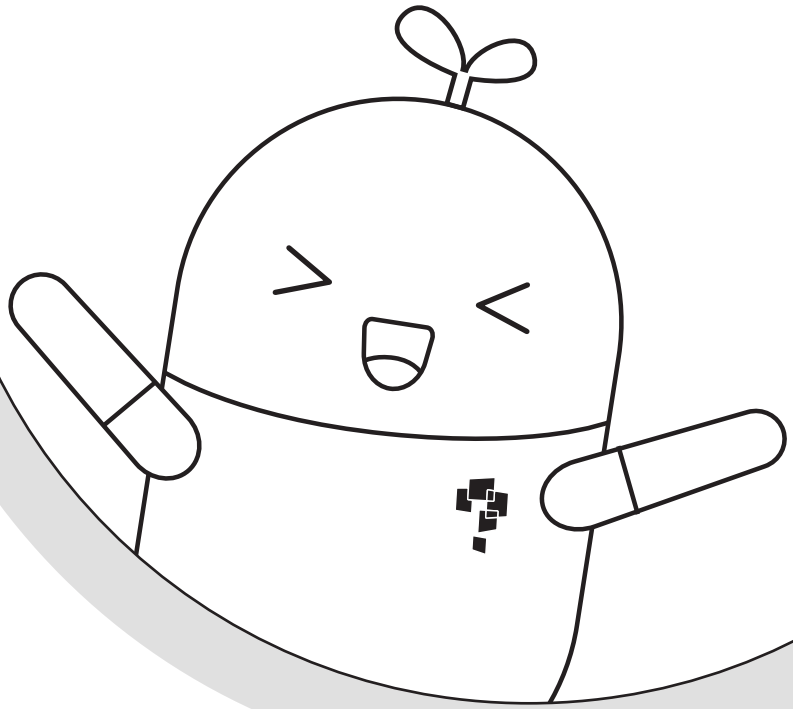
Answers



Think Academy

Basic Math

Think Academy

G2【B1】Number and Operations

Addition and Subtraction within 100

1 (1) 1:30

2:5

(2) 1:60

2:8

(3) 1:43

2:17

2 (1) 1:33

2:98

(2) 1:98

2:27

(3) 1:13

2:69

(4) 1:55

2:83

3 (1) 1:82

2:54

(2) 1:91

2:89

(3) 1:100

2:69

4 (1) 1:3

2:6

(2) 1:25

2:9

(3) 1:21

2:23

(4) 1:13

2:22

(5) 1:16

2:15

5 (1) 79

(2) 89

(3) 87

6 (1) $83-6=77$

$$\begin{array}{r} 8\ 3 \\ -\quad 6 \\ \hline 7\ 7 \end{array}$$

(2) $22+49=71$

$$\begin{array}{r} 2\ 2 \\ +\ 4\ 9 \\ \hline 7\ 1 \end{array}$$

7 (1) 1:30

2:34

(2) 1:47

2:42

(3) 1:36

2:45

(4) 1:41

2:43

(5) 1:61

2:52

8 (1) 1:11

2:4

(2) 1:7

2:11

(3) 1:26

2:28

9 1:64 + 38 = 102

2:36 + 17 = 53

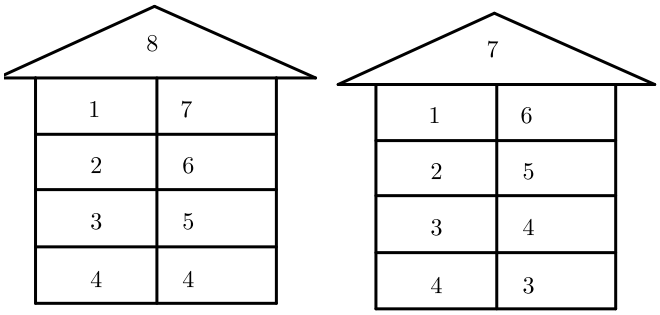
10 (1) 28

(2) 29

(3) 37

(4) 48

11



12 (1) 1:87

2:7

(2) 1:19

2:38

(3) 1:95

2:134

(4) 1:107

2:37

13 (1) 1:69

2:88

(2) 1:78

2:82

(3) 1:61

2:92

14 (1) 1:48

2:40

(2) 1:56

2:55

(3) 1:23

2:59

15 (1) 1:49

2:46

(2) 1:27

2:19

(3) 1:28

2:14

(4) 1:43

2:34

16 62

17 (1) 1:41

2:41

(2) 1:47

2:54

(3) 1:51

2:55

(4) 1:54

2:52

(5) 1:34

2:45

18 1:40

2:55

3:34

4:29

5:45

6:29

19 (1) 79

(2) 84

(3) 98

(4) 59

(5) 86

(6) 69

(7) 99

(8) 58

20 4, 8, 13.

21 (1) 1:51
2:50
(2) 1:12
2:13
(3) 1:33
2:33
(4) 1:32
2:21

22 (1) 1:49
2:14
(2) 1:39
2:33
(3) 1:22
2:48
(4) 1:39
2:31
(5) 1:23
2:49
(6) 1:15
2:47

23 (1) 1:15
2:22
(2) 1:41
2:40
(3) 1:24
2:31
(4) 1:33

2:22

24 (1) 31

(2) 31

(3) 109

(4) 121

25 (1) 88

(2) 76

(3) 96

(4) 67

(5) 87

(6) 86

(7) 77

(8) 68

26 1:11

2:31

27 (1) 1:83

2:83

(2) 1:76

2:74

(3) 1:100

2:94

(4) 1:91

2:91

28

(1) 1:14
2:86

(2) 1:79
2:81

(3) 1:69
2:31

(4) 1:14
2:96

29 $39+62=101$. Mia forgot to include the regrouping on tens place.

30 (1) 1:9
2:24

(2) 1:28
2:48

(3) 1:55
2:24

31 (1) 1:43
2:42

(2) 1:57
2:61

(3) 1:82
2:52

32 (1) 1:34
2:35

(2) 1:20
2:25

(3) 1:31

2:21

(4) 1:21

2:10

(5) 1:31

2:13

33 (1) 98

(2) 107

(3) 108

34 (1) 1:50

2:41

(2) 1:34

2:14

(3) 1:33

2:3

(4) 1:41

2:18

(5) 1:42

2:14

35 (1)

$$\begin{array}{r} 7\ 2 \\ +\ 1\ 3 \\ \hline 8\ 5 \end{array}$$

(2)

$$\begin{array}{r} 3\ 2 \\ +\ 1\ 4 \\ \hline 4\ 6 \end{array}$$

(3)

(4)

$$\begin{array}{r} 4\ \ 4 \\ +\ \ \ 6 \\ \hline 5\ \ 0 \end{array} \qquad \begin{array}{r} 3\ \ 8 \\ +\ 2\ \ 9 \\ \hline 6\ \ 7 \end{array}$$

36 (1) 1:19

2:14

(2) 1:9

2:5

(3) 1:29

2:13

(4) 1:5

2:23

(5) 1:18

2:14

37 (1) 1:87

2:100

(2) 1:62

2:79

(3) 1:92

2:100

38 (1) 1:16

2:28

(2) 1:27

2:23

(3) 1:16

2:22

(4) 1:25

2:9

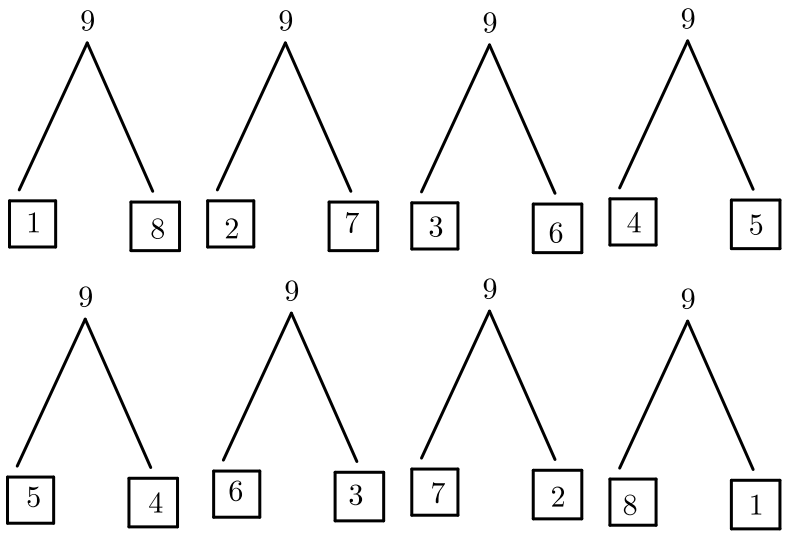
(5) 1:23

2:21

(6) 1:22

2:30

39



40 1 and 4, 2 and 3.

41 (1) 1:112

2:116

(2) 1:100

2:18

(3) 1:28

2:27

(4) 1:29

2:125

42 (1) 1:57

2:58

(2) 1:8

2:45

(3) 1:27

2:9

(4) 1:19

2:45

43 (1) 46

(2) 48

(3) 46

(4) 45

(5) 43

(6) 26

44 (1)

$$\begin{array}{r} 3\ 6 \\ +\quad 8 \\ \hline 4\ 4 \end{array}$$

(2)

$$\begin{array}{r} 3\ 5 \\ +\ 3\ 5 \\ \hline 7\ 0 \end{array}$$

(3)

$$\begin{array}{r} 2\ 7 \\ +\quad 8 \\ \hline 3\ 5 \end{array}$$

(4)

$$\begin{array}{r} 6\ 6 \\ +\ 2\ 7 \\ \hline 9\ 3 \end{array}$$

45 (1) 1:116

2:90

(2) 1:117

2:137

(3) 1:71

2:90

(4) 1:88

2:105

46 (1) 1:21

2:9

(2) 1:41

2:27

(3) 1:26

2:32

47 (1) 1:45

2:22

(2) 1:35

2:39

(3) 1:34

2:20

(4) 1:39

2:23

(5) 1:31

2:46

(6) 1:39

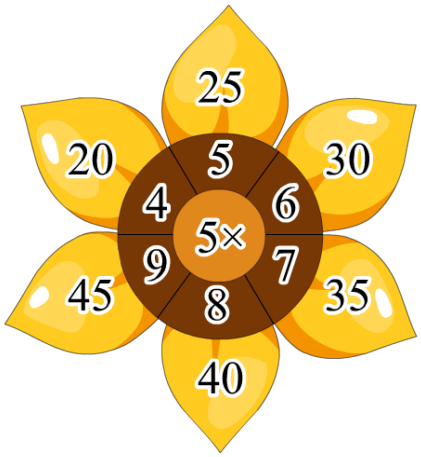
2:23

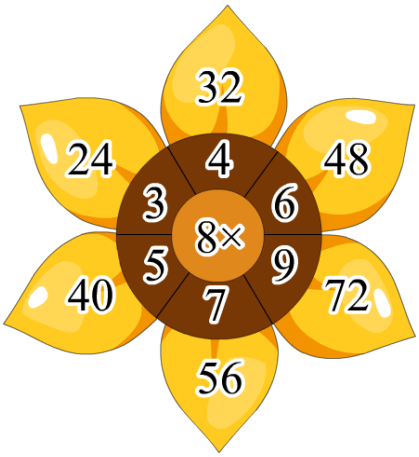
Multiplication

1 $2 \times 6 = 12$ or $4 \times 3 = 12$

2 $3 \times 6 = 18$ or $6 \times 3 = 18$

3





4 40 ; 42 ; 72 ; 45 ; 64

5 $2 \times 4 = 8$ or $4 \times 2 = 8$

6 (1) 1:36

2:4

(2) 1:28

2:14

(3) 1:16

2:30

(4) 1:54

2:36

7 $2 \times 5 = 10$

8 1:3

Alternative:5

2:5

Alternative:3

3:15

9 (1) 1:24

2:28

(2) 1:18

2:15

(3) 1:64

2:30

(4) 1:14

2:16

10 (1) 56

(2) 10

(3) 35

(4) 16

(5) 40

11 (1) 64

(2) 63

(3) 27

(4) 49

(5) 42

12 1:5

2:3

3:15

13 $1:4$

$2:5$

$3:20$

14 (1) $5 \times 2 = 10$ or $2 \times 5 = 10$

(2) $4 \times 5 = 20$ or $5 \times 4 = 20$

15 (1) $1:24$

$2:8$

(2) $1:36$

$2:12$

(3) $1:10$

$2:40$

(4) $1:56$

$2:28$

(5) $1:48$

$2:81$

16 (1) $4 \times 6 = 24$

(2) $5 \times 5 = 25$

17 $3 \times 5 = 15$

18 $1:5$

Alternative:7

$2:7$

Alternative:5

3:35

19 6 ; 8 ; 12 ; 8 ; 4 ; 9 ; 6 ; 16 .

20 (1) 1:5

2:4

(2) 1:6

2:3

21 1:4

2:4

3:16

22 There are $6 \times 6 = 36$ leaves.

23 $2 \times 5 = 10$

24 (1) 1:32

2:12

(2) 1:16

2:6

(3) 1:72

2:18

(4) 1:48

2:9

(5) 1:14

2:15

25 (1) 1:72

2:40

(2) 1:18

2:8

(3) 1:24

2:25

(4) 1:48

2:6

26 (1) 1:28

2:45

(2) 1:14

2:24

(3) 1:42

2:63

(4) 1:54

2:27

(5) 1:49

2:72

G2【B2】Geometry

Plane Shapes

1 The tree in the middle.

2 6

3 20

4 1:4

2:2

3:6

4:5

5 5

6 There are 6 rectangles, and 2 triangles

7 4, 10, 3, 4, 5

8 1:4

2:4

3:6

4:2

9

10 4

11 C 12 BAEFC D

13 17

14 4 triangles

3 rectangles

1 square

3 circles

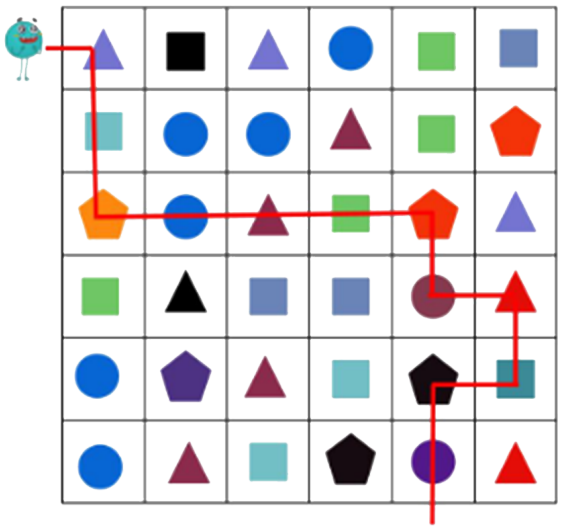
15 1:2

2:8

3:7

4:7

16



17 BAEFC D

18 1:2

2:3

3:8

4:6

19 6

20 B 21 A

22 2, 8, 2, 2, 2

23 2

Solid Figures

1 1:4

2:3

3:4

4:5

2 7

3 A

4 (1) 1:6

2:8

3:12

4:same

(2) 1:8

2:12

3:6

4:1

5 B

6 1:6

2:12

3:5

4:8

5:8

6:18

7 1:①,④,⑨,⑬,

2:②,③,⑤,⑥,⑦,⑧,⑩,⑪,⑫,⑭,⑮

3:⑥,⑭,⑮

8 5

9 B

10 The first figure has 8 vertices, 6 faces, and 12 edges.

The second figure has 6 vertices, 6 faces, and 10 edges.

The third figure has 10 vertices, 7 faces, and 15 edges.

The fourth figure has 5 vertices, 6 faces, and 9 edges.

11 (1) the same

(2) equal

12 2, 3, 7, 4, 6, 5.

13 6, 6, 5.

14 C

15 Cone

16 DBCAE F

17 24 .

18 × × × 19 C

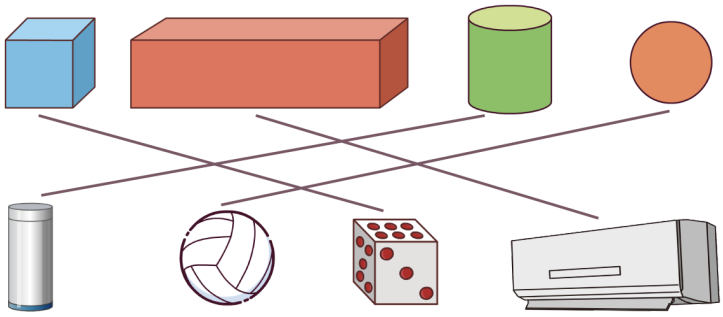
20 1:7

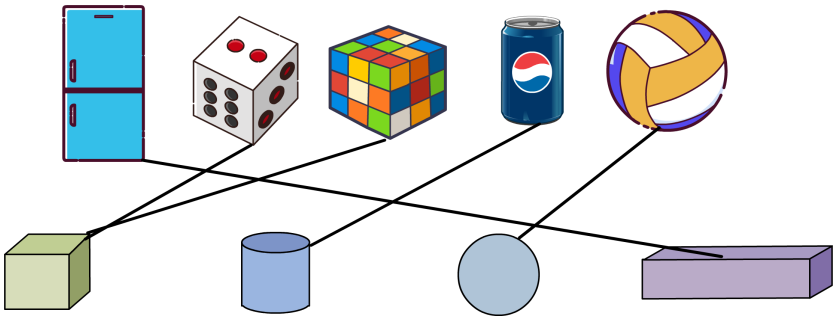
2:4

3:3

4:2

21 DABC

22 

23 

24 4

25

26 1:1

2:1

3:1

27 1:1

2:8

3:5

4:2

5:3

28 D 29 ECBFA D 30 D

Think Academy

G2【B3】Word Problems

Addition and Subtraction Word Problems

1 84

2 10

3 80

4 65

5 132

6 70

7 100

8 65

9 130

10 114

11 105

12 64

13 55

14 128

15 65

16 81

17 60

18 148

19 110

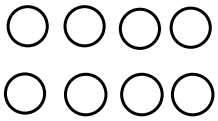
20 110

21 164

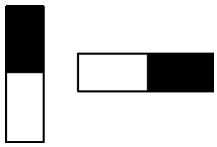
G2【B4】Logical Reasoning

Patterns in Shapes

1

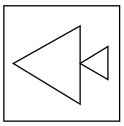


2 (1)



(2)

3



4 5

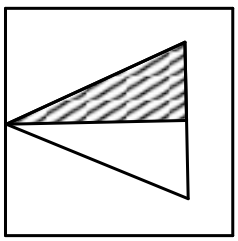
5

6 C

7

8 25

9

10 

11

12 C

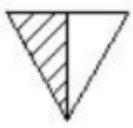
13

14 C 15 A

16

17

18 B

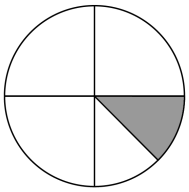
19 

20

21 C 22 A

23 1:1

2:2

24 

25 C 26 B

Patterns in Numbers

1 680

690

700

2 366

367

368

3 986, 984, 981, 980.

4 (1) 30

(2) 33

5 (1) 15

(2) 81

6 610

620

630

7 (1) 52

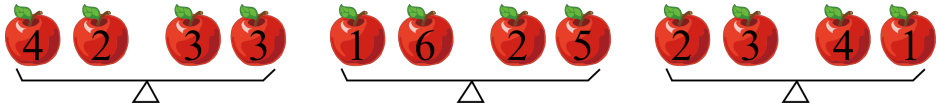
(2) 63

(3) 27

(4) 44

G2【B5】Measurement

Measuring and Comparing

1 

2 1:6

2:3

3 (1) 1:heavier

2:9

(2) 1:lighter

2:2

4 1:6

2:longer

Alternative:Longer

3:6

5 (1) 1:heavier

2:2

(2) 1:lighter

2:2

(3) 1:lighter

2:2

6 4

7 1:2

2:6

8 1:5

2:7

9 6

10 7

11 16

12 1:5

2:1

3:3

13 7

14 (1) 1:3

2:right

(2) 1:2

2:left

(3) 1:6

2:right

Time and Clock

1 1:3

Alternative:03

2:55

3:8

Alternative:08

4:45

5:11

6:20

2 1 : 30; 9 : 30.

3 1 : 20

4 (1) B (2) A

5 4 : 05; 8 : 40

6 B 7 A

8 9:30

5:00

9 1 : 00; 9 : 00

Advanced Math

Think Academy

G2【A1】Number and Operations

Addition and Subtraction Strategies

1 (1) 305

123

(2) 32

40

2 1:85

2:14

3 1:33

2:94

4 (1) +

(2) +

5 (1) 117; 76

(2) 138; 133

6 (1) 250

132

(2) 33

53

7 1:74

2:65

8 1:91

2:75

9 (1) 112

107

(2) 108

99

(3) 1:159

2:139

10 (1) 1:74

2:20

(2) 1:54

2:4

(3) 1:90

2:32

11 (1) : 14

(2) : 25

(3) : 42

12 (1) 12

(2) 18

(3) 48

(4) 70

13 (1) : 121

(2) : 73

(3) : 39

14 (1) 8

(2) 36

15 (1) 12

(2) 16

(3) 58

(4) 50

16 1:127

2:18

17 (1) 75

(2) 49

18 (1) +

(2) +

19 (1) 115

(2) 96

20 1:97

2:70

21 (1) 59

41

(2) 39

12

(3) 394

209

Addition and Subtraction within 1000

1 (1) 294

(2) 289

2 (1) 163

(2) 201

(3) 942

3 (1)

	1	1	
	3	8	6
535, +	1	4	9
	5	3	5

(2)

	1	1	
	3	4	5
634, +	2	8	9
	6	3	4

4 (1) 789

(2) 489

(3) 49

5 (1) 597

(2) 554

6 (1) 425

(2) 848

(3) 582

7 (1) 195

(2) 264

8 914

9 (1) 101

(2) 96

(3) 281

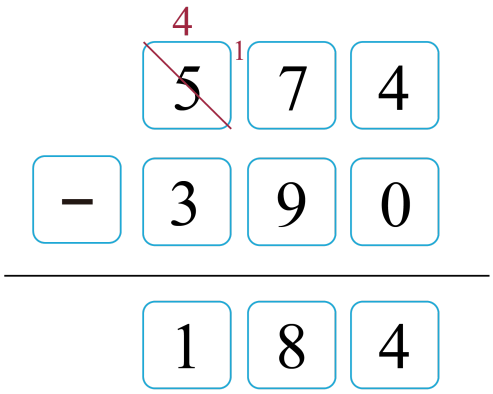
(4) 832

10 194

11 (1) 95

(2) 211

12



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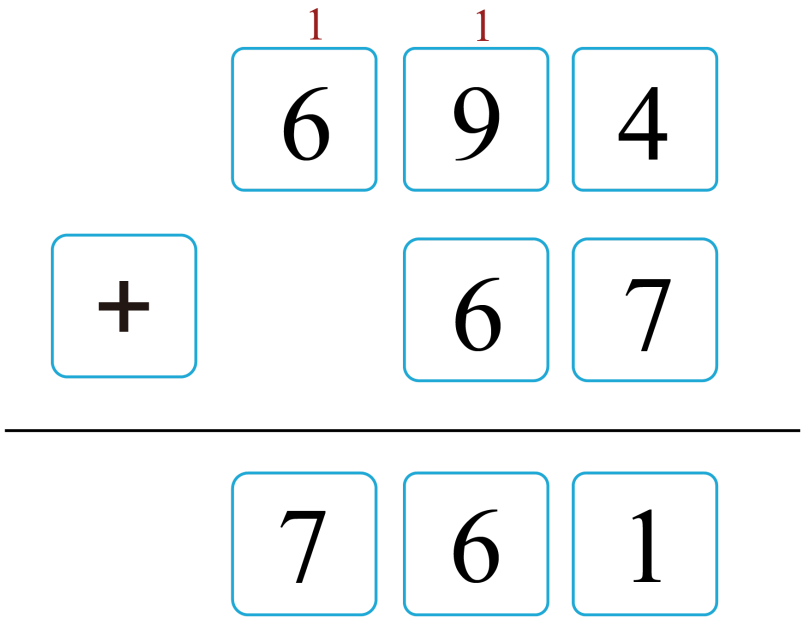
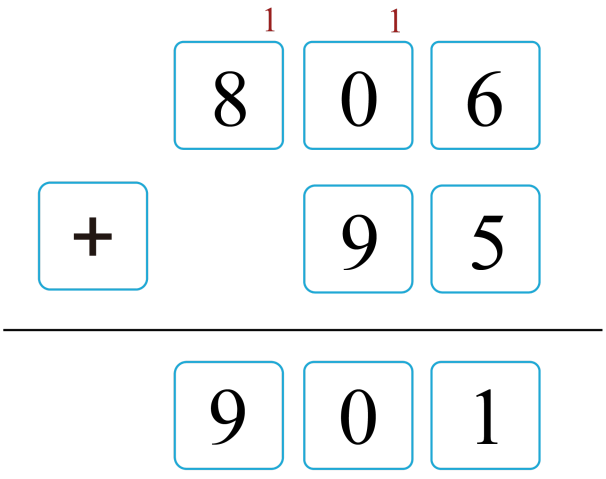


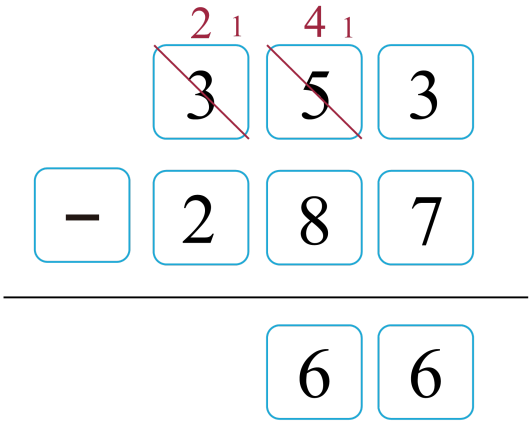
14 (1) **216**

(2) **303**

15



16



17 (1) 667

(2) 449

Multiplication and Division Calculation

1 (1) 1:15

2:8

(2) 1:30

2:4

(3) 1:27

2:9

(4) 1:24

2:4

(5) 1:16

2:2

2 35

3 8

4 (1) 1:6

2:9

(2) 1:6

2:9

(3) 1:7

2:24

(4) 1:3

2:4

5 (1) 5 15 3

(2) 18 6 12

(3) 8 4 24

6 9

7 (1) 1:6

2:5

(2) 1:2

2:7

(3) 1:3

2:6

(4) 1:6

2:6

(5) 1:7

2:7

(6) 1:18

2:4

8 (1) 9

(2) 48

(3) 6

(4) 8

(5) 18

9 (1) 1:4

2:3

(2) 1:7

2:5

(3) 1:2

2:63

(4) 1:8

2:7

(5) 1:9

2:4

(6) 1:24

2:7

10 1:6

2:9

3:3

4:2

5:9

6:8

7:4

8:2

9:6

11 $15 \div 3 = 5$

12 (1) **2**

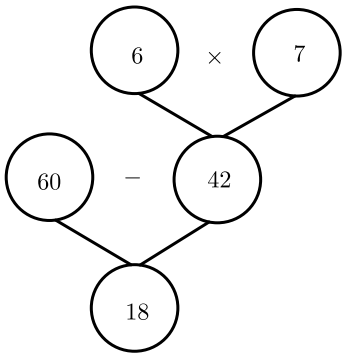
(2) **36**

(3) **6**

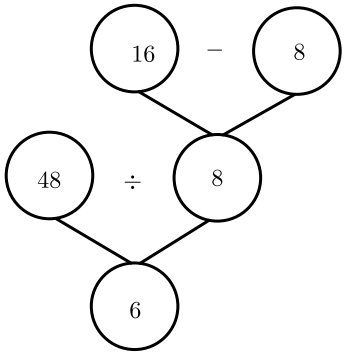
(4) **8**

(5) **25**

13 (1)



(2)



14 (1) 1:**7**

2:**1**

(2) 1:**8**

2:**2**

(3) 1:**8**

2:**2**

(4) 1:**7**

2:**5**

15 (1) **4**

(2) 36

(3) 4

(4) 0

(5) 48

16 (1) 2

(2) 25

(3) 3

(4) 9

(5) 24

17 5

18 (1) 9

(2) 5

(3) 4

(4) 9

(5) 7

19 $8 \times 5 = 40$ or $5 \times 8 = 40$

20 (1) 9

(2) 42

(3) 4

(4) 6

(5) 45

21 (1) 1

(2) 45

(3) 7

(4) 7

(5) 72

22 $3 \times 5 = 15$,

$15 \div 5 = 3$,

$15 \div 3 = 5$.

23 21

24 (1) (1): 63

(2): 63

(3): 9

(4): 7

(2) (1): 7

(2): 9

(3): 7

(4): 6

25 3

26 $4 \times 7=28$

$7 \times 4=28$

27 (1) $1:42$

$2:8$

(2) $1:63$

2:2

(3) 1:21

2:3

(4) 1:20

2:2

G2 【A2】Geometry

Understand the Perimeter

1 56

2 B

3 88 cm

4 34

5 154

6 49 cm.

7 30 cm.

8 ①24 m；②20 m .

9 12

10 (1) 14

(2) 16

(3) 14

11 48

12 40 cm

13 220

14 C

15 38

16 55 cm

The Perimeter of Rectangle and Square

1 32 cm

2 (1) 140 cm

(2) 114 cm

3 8

4 2400 m

5 20cm, 20cm.

6 1:30

2:60

7 A

8 6 m

9 8 cm

10 C

11 30

12 1:26

2:20

13 1:28

2:40

14 10

15 1:60

2:64

16 ①24m

②28m

17 1600 m

18 86

19 9 cm

20 (1) 18 m

(2) 10 m

(3) 28 m

21 3000 inches

22 120 m

23 48 cm

24 3200 m

25 (1) 40 m

(2) 16 m

26 16

Counting Plane Shapes

1 61

2 7

3 35

4 6

5 21

6 21

7 12

8 59

9 36

10 (1) 10

(2) 15

11 6

12 36

13 29

Counting Cubes

1 16

2 C

3 7

4 14

5 A

6 5

7 1:4

2:6

3:4

8 9, 12.

9 13

10 4

11 6

12 6 ; 8

13 7

14 17

15

	①	②	③
number of cubes	10	7	10

16 1:6

2:6

3:14

17 16

18 30

19 9，11．

20 10；10

21 3

22 11；10

23 9

24 C

25 1:7

2:8

3:9

G2【A3】Word Problems

Multiplication and Division Problems

1 (1) 1:16

2:8

3:16

4:2

5:8

6:16

7:4

8:16

9:4

10:4

(2) 1:18

2:6

3:18

4:3

5:6

6:18

7:3

8:18

9:6

10:3

2 (1) $3+3+3+3+3=15$ or $5+5+5=15$; $3\times5=15$ or $5\times3=15$.

(2) $8+8+8+8=32$ or $4+4+4+4+4+4+4+4=32$; $4\times8=32$ or $8\times4=32$.

3 D 4 C

5 5

6 C

7 18

8 C

9 12

10 5

Split Number Problems

1 5

2 38

3 3

4 4

5 D

6 1

7 22

8 11

9 4

Interval Problems

1 1:3

2:6

2 1:7

2:9

3 37

Lining Up Problems

1 C 2 B

3 6

4 14

5 D 6 A 7 D

8 13

9 19

10 D

11 17

12 B 13 C 14 B

15 5

16 7

17 8

18 C

19 6

20 6

21 A 22 A

23 6

24 B

25 8

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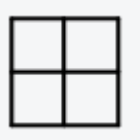
G2【A4】Logical Reasoning

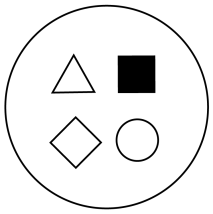
Patterns in Shapes

1 B

2 

3 B 4 C 5 D 6 B

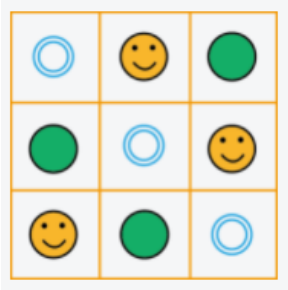
7

8 

9 A 10 B

11

12



13 A 14 A

Equal and Balance

1 9; 6; 7

2 1

3 1:3

2:2

3:1

4 12

5 3

6 A

7 6.

8 6

9 1:8

2:9

10 1:10

2:5

11 10; 20

12 3

13 1:2

2:3

3:1

14 10.

15 8

16 3; 4

17 9.

18 = (11)

= (2)

= (4)

= (5)

19 3

20 $6; 4; 2$

21 blue flower $= 3$, red flower $= 9$.

22 D

23 6

24 C

25 6

26 4

27 4

28 6

G2【A5】Measurement

Time and Clock

1 7:42; 6:15

2 5; 5.

3 8 : 50 a.m.; 8 : 25 a.m.

4 B 5 D 6 C

7 5 : 30; 4 : 45

Money Calculation

1 1:4

2:3

2 5

3 4

4 ①If she buys a notebook and a scissor, there is no money left.

②If she buys a notebook and a ruler, she still has 1 dollar.

③If she buys a scissor and a ruler, she still has 2 dollars.

④If she buys a ruler and a pencil-box, there is no money left.

(There is no single answer)

5 B

6 1:6

2:4

7 His money is enough, and the change is 2 dollars.

8 Not enough, she needs 2 dollars more.

9 (1) $25+18=43$ dollars.

(2) $18+15=33$ dollars

10 (1) 10 dollars.

(2) 13 dollars

11 74 dollars

12 (1) Type B.

(2) 12 dollars.

13 28 dollars 13 cents

14 (1) 1:35

2:–

3:27

4:8

(2) 1:46

2:+

3:54

4:100

15 (1) 10 dollars.

(2) Toy car is the most expensive one and doll is the cheapest one.

The difference is 14 dollars.

16 (1) 13 dollars.

(2) 5 dollars

17 No; she needs 6 dollars more.

Crazy Math

Think Academy

Think Academy

G2 [C1] MK Level 1-2

1 C 2 D 3 B 4 E 5 C 6 B 7 A 8 E 9 D 10 D 11 C

12 C 13 B 14 C 15 B 16 B 17 B 18 D 19 C 20 D 21 B 22 D

23 D 24 B 25 D 26 D 27 C 28 D 29 C 30 C 31 C 32 D 33 D

34 D 35 D 36 C 37 B 38 A 39 C 40 D 41 D 42 C 43 B 44 C

45 B 46 B 47 A 48 B 49 B 50 A 51 E 52 C 53 C 54 D 55 C

56 D 57 C 58 E 59 E 60 C 61 B 62 C 63 A 64 A

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G2 [C2] Think Cup

1 C 2 A 3 D 4 A 5 B 6 C 7 C 8 A 9 C 10 B 11 B

12 E 13 B 14 C 15 D 16 B 17 B 18 C 19 B 20 D 21 C 22 B

23 D 24 C 25 D 26 A 27 B 28 D 29 E 30 B 31 E 32 B 33 C

34 D 35 E 36 E 37 D 38 B 39 B 40 A 41 B 42 D 43 C 44 E

45 C

Think Academy