

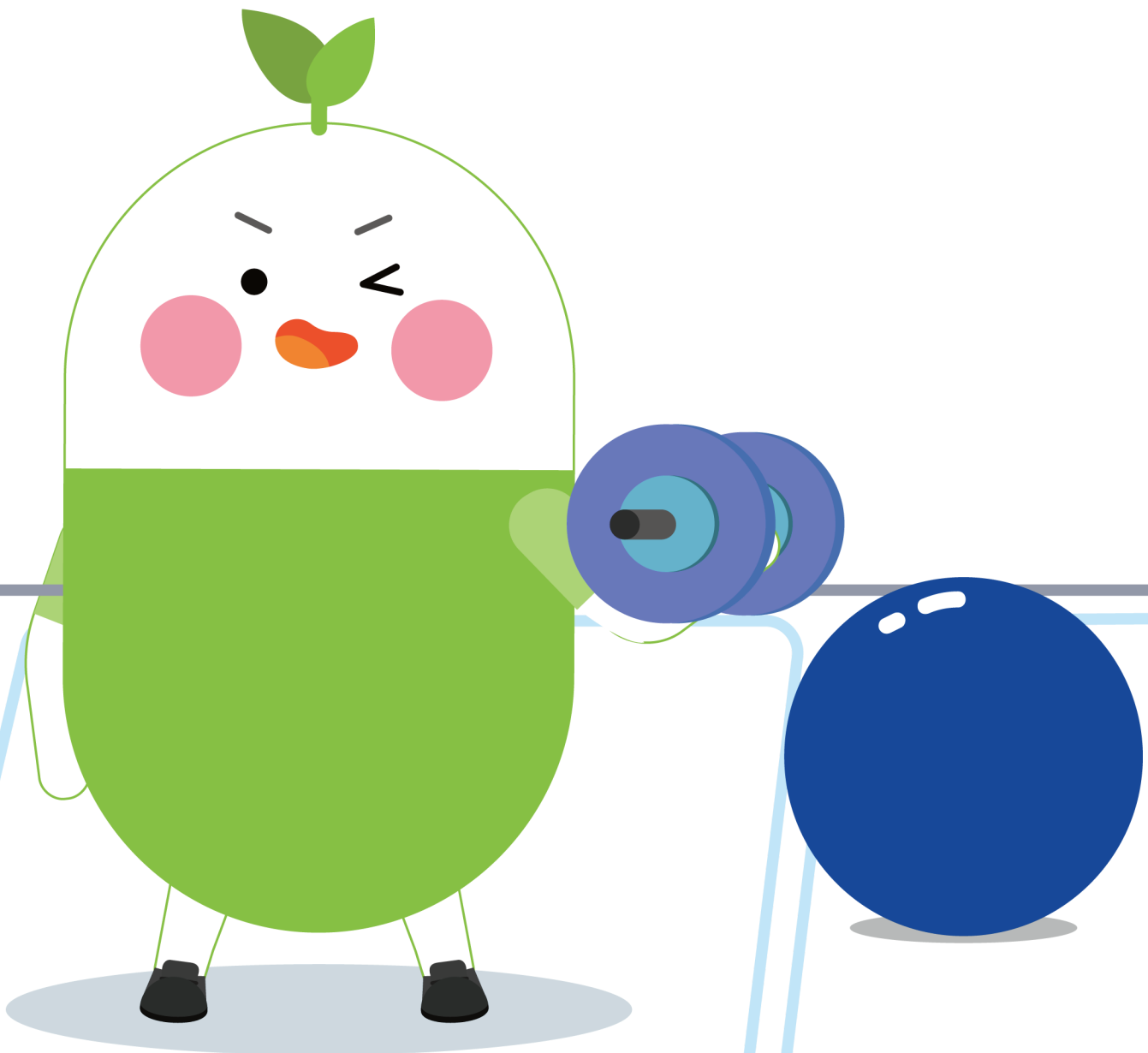
2023

Spring

G3

Review Class

M L13-L15



Lesson 13

- 1 Continuous natural numbers starting from 1 are arranged in the picture shown below. Now use a cross to frame seven numbers:

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
.....						

Which of the following numbers can be the sum of the seven numbers in a frame?

- A. 245 B. 273 C. 308 D. 289

- 2 Continuous natural numbers starting from 1 are arranged in the picture shown below.

(1) The number in row 9, column 4 is _____ .

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
.....					

(2) 75 is in row _____ , column _____ .

- 3 Continuous natural numbers starting from 1 are arranged in the picture shown below.

(1) The number in row 3, column 12 is _____ .

1	5	9	13	
2	6	10	14	⋮
3	7	11	15	⋮
4	8	12	16	

(2) 89 is in row _____ , column _____ .

Lesson 14

- 1 Justin said to his mom, "If I had planted three times as many flowers as I planted, I would have planted 48 more flowers than I have planted now." How many flowers did Justin plant?
- A. 12 B. 23 C. 24 D. 22

- 2 Three kangaroos were born consecutively every 4 years. Right now the oldest kangaroo is 5 times as old as the youngest one. How old is the youngest kangaroo?

(2000 Math Kangaroo Problem, Level 3 – 4, Question#19)

A. 10 B. 8 C. 2 D. 4 E. 6

- 3 Andy and his brother Claus each has some books. The amount of Andy's books is 4 times that of Claus's books. After Andy gives 10 books to Claus, he still has 1 more book than Claus. At the beginning, Andy had _____ books and Claus had _____ books.

Lesson 15

1 $\frac{1}{4} \times \frac{1}{2} \times 32 = \underline{\hspace{2cm}}$. (adapted from 1999 Math Kangaroo Problem, Level 5-6, Question #3)

A. 8

B. 16

C. $\frac{16}{3}$

D. 4

E. 6

2 What is the value of the product $(1 + \frac{1}{1}) \times (1 + \frac{1}{2}) \times (1 + \frac{1}{3})$? (adapted from 2018 AMC 8 Problem, Question #2)

A. 1

B. 4

C. $\frac{1}{4}$

D. 8

E. $\frac{1}{6}$

3 Calculate:

$$1\frac{4}{5} \times \frac{4}{7} = \underline{\hspace{2cm}}$$

$$2\frac{1}{6} \times \frac{8}{11} = \underline{\hspace{2cm}}$$

$$3\frac{3}{4} \times 2\frac{2}{3} = \underline{\hspace{2cm}}$$

$$5\frac{1}{2} \times 1\frac{3}{22} = \underline{\hspace{2cm}}$$

Solutions

Lesson 13

1. B
2. (1) 52
(2) 13 ; 3
3. (1) 47
(2) 1 ; 23

Lesson 14

1. C
2. C
3. 28 ; 7

Lesson 15

1. D
2. B
3. $\frac{36}{35}$; $\frac{52}{33}$; 10 ; $\frac{25}{4}$