Think Academy

Review Class

AM L4-L6

2022 Fall G3

Lesson 4

1 Yuki buys some books for his friends. If he gives each friend 6 books, all the books will be distributed. If he gives each friend 8 books, there will be a shortage of 22 books. Yuki has _____ friends.

2 Amanda buys some pink roses for her roommates. If she gives each roommate 9 roses, there will be 17 roses left. If she gives each roommate 12 roses, there will be 2 roses left. Amanda has _____ roommates and _____ roses.

3 Tony distributes strawberries to his students. If he gives each of his students 5 strawberries, there will be 11 strawberries left. If he gives each of them 7 strawberries, there will be 3 strawberries short. He has _____ students and _____ strawberries.

Lesson 5

1 Categorize the following numbers:

$$\frac{5}{8},\ \frac{17}{9},\ 2\frac{3}{7},\ \frac{5}{12},\ \frac{2}{9},\ 10\frac{1}{2},\ \frac{17}{19},\ \frac{23}{14}$$

(1) Proper fraction: _____ .

(2) Improper fraction: _____ .

(3) Mixed number: _____ .

2 Rewrite each improper fraction below as a mixed number.

(1) $\frac{13}{9}$ = _____

(2) $\frac{24}{5}$ = _____

(3) $\frac{77}{13}$ = _____

3 Fill in the blanks.

(1) Write each fraction below in the simplest form.

$\frac{18}{22} = \_\_\_\_\_$, $\frac{6}{30} = \_\_\_\_\_$, $\frac{22}{33} = \_\_\_\_\_$, $\frac{36}{56} = \_\_\_\_\_$.

(2) Rewrite each group of fractions to make them have a common denominator.

$\frac{1}{2}, \frac{1}{4}$

$\frac{2}{3}, \frac{5}{6}$

$\frac{1}{2}, \frac{1}{3}$

Lesson 6

1 Crystal plans to solve some math problems in a certain pattern. She plans to solve 4 problems on the first day, 7 problems on the second day, and 10 problems on the third day. Following this pattern, Crystal will solve _____ problems on the tenth day and _____ problems on the eighteenth day.

2 In the arithmetic sequence $7, 13, 19, 25, \cdots$, the thirteenth term is _____ and the sum of the first thirteen terms is _____ .

3 Calculate: $1 + 8 + 15 + \cdots + 50 + 57 =$ _____ .

Solutions

Lesson 4

1. 11
2. 5 ; 62
3. 7 ; 46

Lesson 5

1. (1) $\frac{5}{8}$, $\frac{5}{12}$, $\frac{2}{9}$, $\frac{17}{19}$
   (2) $\frac{17}{9}$, $\frac{23}{14}$
   (3) $2\frac{3}{7}$, $10\frac{1}{2}$
2. (1) $1\frac{4}{9}$
   (2) $4\frac{4}{5}$
   (3) $5\frac{12}{13}$
3. (1) $\frac{9}{11}$; $\frac{1}{5}$; $\frac{2}{3}$; $\frac{9}{14}$
   (2) $\frac{2}{4}$, $\frac{1}{4}$;
   $\frac{4}{6}$, $\frac{5}{6}$;
   $\frac{3}{6}$, $\frac{2}{6}$.

Lesson 6

1. 31 ; 55
2. 79 ; 559
3. 261