## ASSESSMENT GUIDE

### **CUMULATIVE ASSESSMENT 2**



### Section A Multiple-Choice Questions

(Questions I to IO: 2 points each)

1. 
$$\frac{1}{2} + \frac{3}{7} =$$
\_\_\_\_\_

- $\bigcirc$  A  $\frac{4}{9}$
- $\bigcirc$   $\frac{4}{14}$
- $\bigcirc$   $\frac{3}{14}$

2. 
$$\frac{7}{9} - \frac{1}{4} =$$
\_\_\_\_\_

- $\bigcirc$   $1\frac{1}{5}$
- $\bigcirc$   $\frac{19}{36}$
- $\bigcirc$   $\frac{1}{6}$

3. 
$$5\frac{1}{6} - 3\frac{3}{10} =$$

- $\bigcirc$   $2\frac{1}{2}$

- 4. What is the sum of  $7\frac{3}{8}$  and  $2\frac{5}{6}$ ?
  - (A)  $9\frac{4}{7}$
  - (B) 10
  - $\bigcirc$   $10\frac{5}{24}$
  - **D**  $10\frac{1}{3}$
- **5.** A store had II kilograms of granola.  $7\frac{3}{5}$  kilograms of granola were sold.

How much granola was left in the store?

- $\bigcirc$  3 $\frac{2}{5}$  kg
- $\bigcirc$   $3\frac{3}{5}$  kg
- $\bigcirc$   $4\frac{2}{5}$  kg
- $\bigcirc$  4 $\frac{3}{5}$ kg
- **6.** Which expression is equal to  $\frac{8}{11}$ ?
  - (A) 8 + II
  - (B) 8 × II
  - $\bigcirc$   $\frac{\parallel}{8}$
  - (D) 8 ÷ II



# ASSESSMENT GUIDE NUMBER PATTERNS AND RELATIONSHIPS



### Section A Multiple-Choice Questions

(Questions I to 5: 2 points each)

I. What is the 7th term of the number pattern?

1, 2, 4, 8, 16, ...

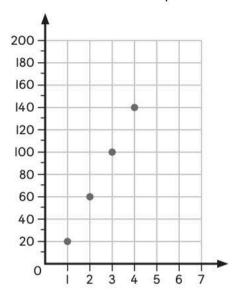
- (A) 17
- (B) 18
- (C) 32
- (D) 64
- 2. This pattern alternates between adding 2 and subtracting 3.

10, 12, 9, ...

What term of the pattern will be the next 9?

- (A) 8th term
- (B) 9th term
- (C) 10th term
- (D) IIth term

3. Look at the coordinate plane.



- Which ordered pair will also be on the graph?
- (A) (5, 160)
- **B** (6, 180)
- (C) (6, 240)
- (D) (7, 260)
- 4. Zack creates two patterns that both start with the number 3. The rule for the first pattern is to multiply the previous number in the pattern by 2. The rule for the second pattern is to add II to the previous number. What is the difference between the 5th term in each pattern?
  - (A) I

B) 12

(C) 13

D 38

Term	1	2	3	4	5
Pattern A	3	6	9	12	15
Pattern B	4	8	12	16	20

If the patterns continue, which statements are always true about corresponding terms?

Choose two correct answers.

- (A) Each term in pattern A will be greater than the corresponding term in pattern B.
- (B) Each term in pattern B will be greater than the corresponding term in pattern A.
- C The difference between each corresponding term in pattern A and pattern B will be the same.
- $\bigcirc$  Each term in pattern A will be  $\frac{3}{4}$  times the corresponding term in pattern B.
- (E) The sum of each corresponding term in pattern A and pattern B will be a multiple of 8.

#### Section B Short Answer Questions

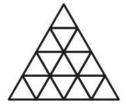
(Questions 6 to 10: 2 points each)

Use the pattern made of unit equilateral triangles to answer Questions 6 and 7.









6. Complete the table for the 4th and 5th figures in the pattern

Figure Number	1	2	3	4	5
Number of Unit Triangles	E	4	9		
Perimeter of the Figure	3	6	9		

- 7. Mayern says that she can figure out the pattern rule for the number of triangles in two different ways:
  - The number of unit triangles is the figure number multiplied by itself.
  - The number of unit triangles is in a pattern of add 3, add 5, add 7, and so on.

Using Mayern's strategy, find two different ways to state the pattern rule for the perimeter of the figure. Explain your pattern rule in the space below.