

1. Matt made up a pattern.

1, 4, 10, 22, 46

What is the rule for Matt's pattern?

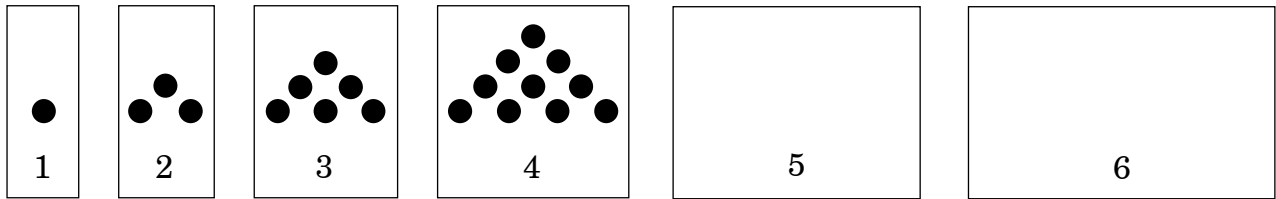
- A add three to the number each time
- B double the number each time
- C multiply the number by two and then add two each time
- D multiply the number by itself and then add the number each time

2. What is the rule for this number pattern?

1, 1, 2, 6, 24, 120, . . .

- A add 0, then add 1, then add 2, and so on
- B multiply by 1, then multiply by 2, then multiply by 3, and so on
- C multiply by 1, then add 1
- D multiply by two, then subtract 1



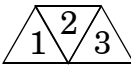
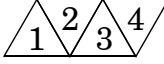
3. A group of children designed a pattern with dots.



How many dots will be in their sixth pattern?

- A 15
- B 17
- C 21
- D 28

4. If the pattern continues, how many toothpicks are needed to make the figure with six triangles?

Number of Triangles	Figure	Number of Toothpicks
1		3
2		5
3		7
4		9
5		
6		

- A 11
B 13
C 15
D 17

8. Dana, Joy, and Puja shared their compact discs (CDs) so that each girl got 12. Which equation can be used to determine how many CDs there were in all?

- A $12 \div 3 = \square$
- B $12 - 3 = \square$
- C $12 + 3 = \square$
- D $12 \times 3 = \square$

9. What is the value of the unknown in the number sentence $\square \div 4 = 9$?

- A 45
- B 36
- C 32
- D 5

End of Goal 5 Sample Items

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Answers to EOG Grade 3 Math Sample Items

Goal 5

- Objective 5.01**
Describe and extend numeric and geometric patterns.
Thinking Skill: Analyzing **Correct Answer:** C
- Objective 5.01**
Describe and extend numeric and geometric patterns.
Thinking Skill: Analyzing **Correct Answer:** B
- Objective 5.02**
Extend and find missing terms of repeating and growing patterns.
Thinking Skill: Generating **Correct Answer:** C
- Objective 5.02**
Extend and find missing terms of repeating and growing patterns.
Thinking Skill: Generating **Correct Answer:** B
- Objective 5.02**
Extend and find missing terms of repeating and growing patterns.
Thinking Skill: Generating **Correct Answer:** B
- Objective 5.02**
Extend and find missing terms of repeating and growing patterns.
Thinking Skill: Applying **Correct Answer:** B
- Objective 5.03**
Use symbols to represent unknown quantities in number sentences.
Thinking Skill: Applying **Correct Answer:** C
- Objective 5.03**
Use symbols to represent unknown quantities in number sentences.
Thinking Skill: Applying **Correct Answer:** D
- Objective 5.04**
Find the value of the unknown in a number sentence.
Thinking Skill: Applying **Correct Answer:** B