



1. One number in this pattern is wrong.

22	26	30	36	38	42
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What change should be made to correct this pattern?

- A replace 26 with 24
- B replace 26 with 28
- C replace 36 with 34
- D replace 42 with 40

2. Sonya folded a sheet of paper and recorded the number of resulting sections after each fold.

Number of Folds	Number of Sections
1	2
2	4
3	8
4	
5	

How many sections would result after the 5th fold?

- A 18
- B 24
- C 28
- D 32

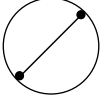
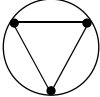
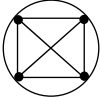

3. A radio station will announce the winner of a contest when 3,200 callers have phoned the station. This chart shows the total number of phone calls received.

Time	Number of Calls
3:00 p.m.	400
4:00 p.m.	650
5:00 p.m.	950
6:00 p.m.	1,300

If the pattern continues, when will the radio station announce a winner?

- A 8:00 p.m.
- B 9:00 p.m.
- C 10:00 p.m.
- D 11:00 p.m.

4. The chart shows the greatest number of line segments that can connect various numbers of points on a circle.

Figure	Number of Points	Number of Line Segments
	2	1
	3	3
	4	6
	5	10

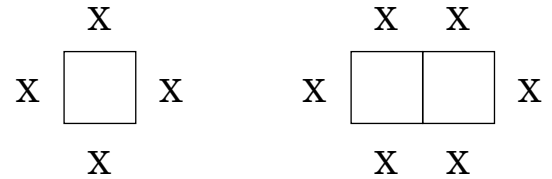
Based on the number pattern, how many line segments will connect 8 points?

- A 28
- B 25
- C 21
- D 16

5. There are 36 fifth-graders in art class. The art teacher wants to arrange their pictures on the wall so that one is in the first row, two are in the second row, three are in the third row, etc. How many rows of pictures will there be?

A 8 rows
B 9 rows
C 10 rows
D 11 rows

6. The librarian is setting up tables in the media center. He can place 4 chairs around one small table. He will push tables together in a single row to make a bigger table. If he pushes 2 small tables together, he can place six chairs around the bigger table.



If 10 people need to sit around the table, what is the least number of small tables the librarian should push together?

A 3
B 4
C 5
D 6


7. Josh wants to save \$165.00 to buy a pair of in-line skates. He plans to save \$1 the first month, \$3 the second month, \$6 the third month, and \$10 the fourth month.

Josh's Savings

Month	Amount saved during month	Total savings
1	\$1	\$1
2	\$3	\$4
3	\$6	\$10
4	\$10	\$20
•	•	•
•	•	•
•	•	•

If Josh continues this savings pattern, how many months will it take Josh to save \$165.00?

- A 5 months
- B 7 months
- C 9 months
- D 13 months

8. Patrick and Susan both collect stamps. Susan has 5 times as many stamps as Patrick. If  is used to represent the number of stamps that Patrick has, which expression describes the total number of stamps that Patrick and Susan have together?

A $(5 + \text{stamp}) \times \text{stamp}$

B $(5 - \text{stamp}) + \text{stamp}$

C $(5 + \text{stamp}) + \text{stamp}$

D $(5 \times \text{stamp}) + \text{stamp}$

9. Shannon kept a chart to show how many pages she read each day.

Day	Pages Read
1	5
2	8
3	11
4	14

How many pages will she read on the twelfth day if she continues this pattern?

- A 35 pages
- B 38 pages
- C 41 pages
- D 44 pages

10. Mr. Thompson started a math club at school. In its first year, the club had 12 members. The table below shows the increase in club membership.

Second Year	Increase of 3
Third Year	Increase of 6
Fourth Year	Increase of 9

If this growth pattern continues, how many members will the math club have at the end of the eighth year?

- A 21
- B 66
- C 75
- D 96

11. Maria's family drives 328 miles from Asheville to Wilmington every summer. Maria's father drives at a constant speed of 50 miles per hour. **About** how much driving time does it take Maria's family to get to Wilmington?

- A $7\frac{1}{2}$ hours
- B 7 hours
- C $6\frac{1}{2}$ hours
- D 6 hours

End of Goal 5 Sample Items

Item #6 revised May 2006.

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Answers to EOG Grade 5 Math Sample Items

Goal 5

- Objective 5.01**
Describe, extend, and generalize numeric and geometric patterns using tables, graphs, words, and symbols.
Thinking Skill: Analyzing **Correct Answer:** C
- Objective 5.01**
Describe, extend, and generalize numeric and geometric patterns using tables, graphs, words, and symbols.
Thinking Skill: Applying **Correct Answer:** D
- Objective 5.01**
Describe, extend, and generalize numeric and geometric patterns using tables, graphs, words, and symbols.
Thinking Skill: Generating **Correct Answer:** C
- Objective 5.01**
Describe, extend, and generalize numeric and geometric patterns using tables, graphs, words, and symbols.
Thinking Skill: Applying **Correct Answer:** A
- Objective 5.01**
Describe, extend, and generalize numeric and geometric patterns using tables, graphs, words, and symbols.
Thinking Skill: Generating **Correct Answer:** A
- Objective 5.02**
Use algebraic expressions, patterns, and one-step equations and inequalities to solve problems.
Thinking Skill: Generating **Correct Answer:** B
- Objective 5.02**
Use algebraic expressions, patterns, and one-step equations and inequalities to solve problems.
Thinking Skill: Generating **Correct Answer:** C
- Objective 5.02**
Use algebraic expressions, patterns, and one-step equations and inequalities to solve problems.
Thinking Skill: Analyzing **Correct Answer:** D

9. Objective 5.02

Use algebraic expressions, patterns, and one-step equations and inequalities to solve problems.

Thinking Skill: Generating

Correct Answer: B

10. Objective 5.03

Identify, describe, and analyze situations with constant or varying rates of change.

Thinking Skill: Generating

Correct Answer: D

11. Objective 5.03

Identify, describe, and analyze situations with constant or varying rates of change.

Thinking Skill: Applying

Correct Answer: C