Name _____ Class _____ Date _____
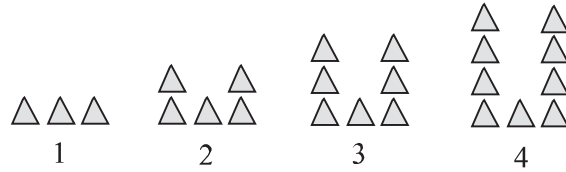
Analyzing Patterns Using Tables and Graphs

1. a) Draw the next figure in the pattern.

    1   2   3   4

b) Complete the table.

Figure	Number of triangles
1	3
2	5
3	_____
4	_____
5	_____
6	_____

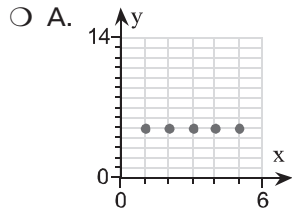**2.** The table shows the relationship between the number of correct answers and the total points.

Correct Answer	Total Points
3	9
5	15
7	21
9	27

What is the relationship suggested by the table?

○ A. Square the number of correct answers to find the total points.

○ B. Triple the number of correct answers to find the total points.

○ C. Double the number of correct answers to find the total points.

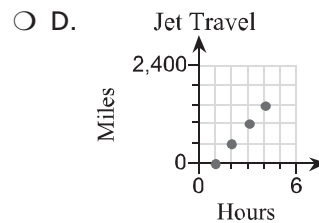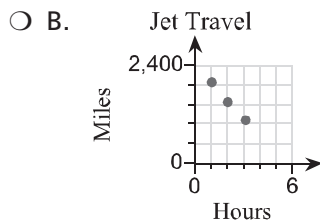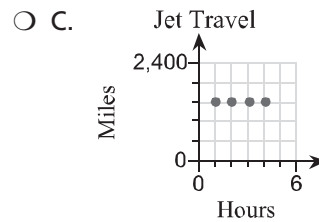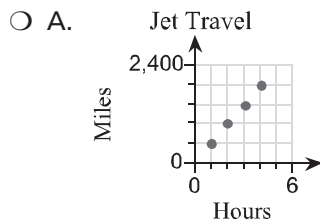○ D. Subtract 2 from each correct answer to find the total points.

3. Use the table to decide which graph shows the relationship between x and y.

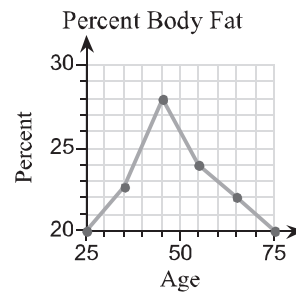| x	y
1	5
2	6
3	7
4	8
5	9

○ A.

○ B.

○ C.

○ D.
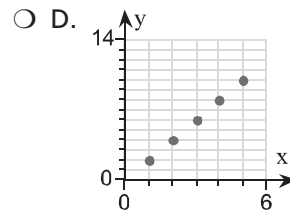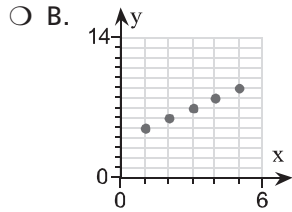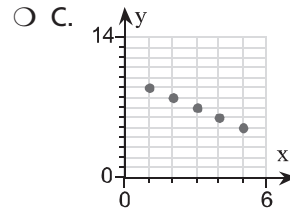
4. Each hour, a passenger jet can travel 480 miles.
Which graph shows the relationship between hours and miles?

Jet Travel

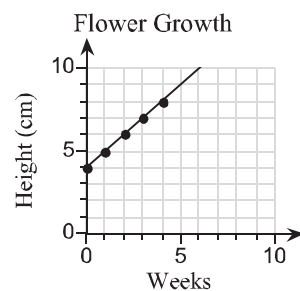| Hours	Miles
1	480
2	960
3	1,440
4	1,920

○ A.

○ B.

○ C.

○ D.

5. The graph shows the relationship between age and percentage body fat in men. Which point falls on the graph?

○ A. (45,28)
○ B. (55, 28)
○ C. (28, 45)
○ D. (20, 28)

6. The graph shows the relationship between the number of weeks since a flower was planted and its height. Which points fall on the graph? Check all that apply.

❏ A. (4, 6)
❏ B. (6, 4)
❏ C. (2, 6)
❏ D. (4, 8)

**7.** In the table as x increases by 1, the value of y increases by 5.

   a) Complete the table.

| x	0	1	2	3	4	5
y	0	5	10	____	____	____

   b) Which statement shows the relationship between x and y?

   ○ A. Each value of y is 5 times the corresponding value of x.

   ○ B. Each value of y is 5 greater than the corresponding value of x.

   ○ C. Each value of y is 4 times the corresponding value of x.

   ○ D. Each value of y is 4 greater than the corresponding value of x.

   c) Use the table to choose the graph that shows the relationship between the x and y.

○ A.

○ C.

○ B.

○ D.

1. a)
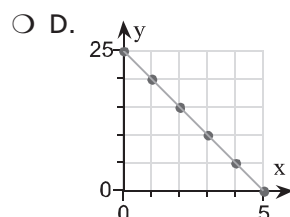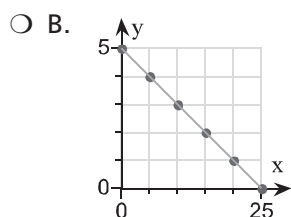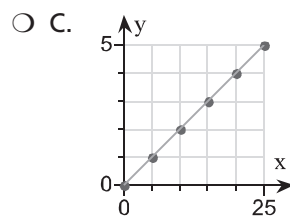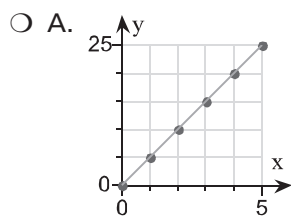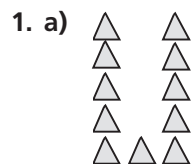
b) 7
9
11
13

2. B

3. B

4. A

5. A

6. C, D

7. a) 15
20
25

b) A

c) A

8. a) 10
20
30

b) D

c) A

9. B

10. a) A, B

b) D

11. a) A

b) C

12. a) 2
4
6
8

b) C

c) B

d) $120

13. a) 30
32
34
36

b) Answers will vary

14. C

15. a) right, up

b) B

16. a) B

b) 200
400
800
1,000

c) B

d) B