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Chapter 6 Practice Test

For #1 to #3, choose the best answer.
Use this pattern for #1 and #2.

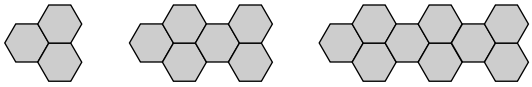


Figure 1 Figure 2 Figure 3

1. Which table of values best represents the figures?

A

Figure Number (*f*)	1	2	3	4
Number of Sides (*s*)	18	36	54	72

B

Figure Number (*f*)	1	2	3	4
Number of Sides (*s*)	18	28	38	48

C

Figure Number (*f*)	1	2	3	4
Number of Sides (*s*)	12	20	28	36

D

Figure Number (*f*)	1	2	3	4
Number of Sides (*s*)	12	24	36	48

2. Which equation represents the pattern?

A $s = 12f$

B $s = 8f + 4$

C $s = 10f + 8$

D $s = 18f$

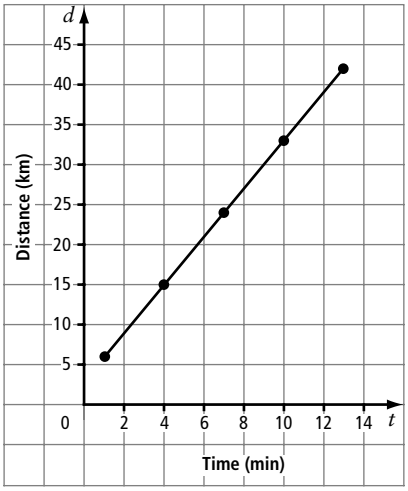
3. Which equation represents this graph?

A $d = 2t + 4$

B $d = 4t - 1$

C $d = 3t + 3$

D $d = t + 5$



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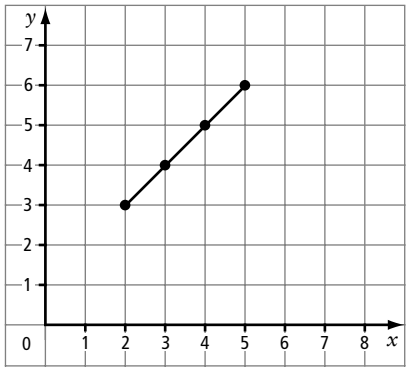
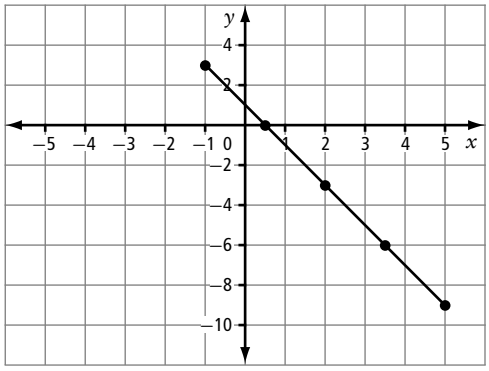
Complete the statements in #4 and #5.

4. When $x = 1.5$ on the graph, the approximate y-coordinate is _____.



5. When $y = -8$ on the graph, the approximate x-coordinate is _____.



Short Answer

6. A number pattern starts with –2. Each number is 4 less than the previous number.

a) Complete the table of values for the first 5 numbers in the pattern.

Term, t	Value, v
1	–2
2	−6
3	
4	
5	

b) Complete the equation to find each number in the pattern: $v = -4t +$ _____

c) What is the value of the 11th number in the pattern?

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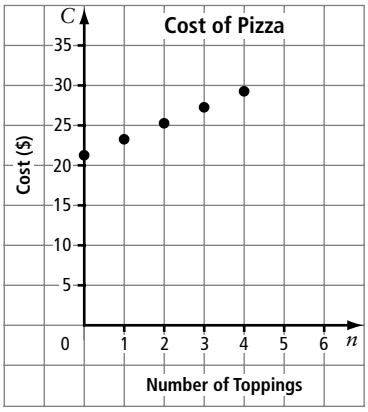
7. A party-sized cheese pizza costs $21.25. The graph shows the cost of adding extra toppings.



a) What is the approximate cost of a party pizza with

5 toppings? _____

b) Is it reasonable to interpolate values on this graph? Circle YES or NO. Give 1 reason for your answer.

_____

_____

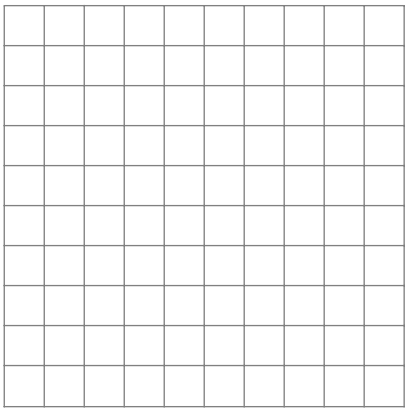
8. Complete a table of values and graph for each linear equation.

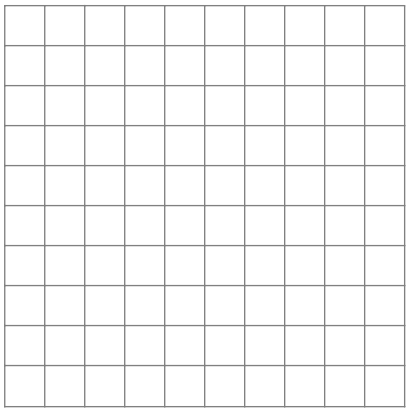
a) $y = -2x + 6$

x	*y*

b) $y = 6$

x	*y*





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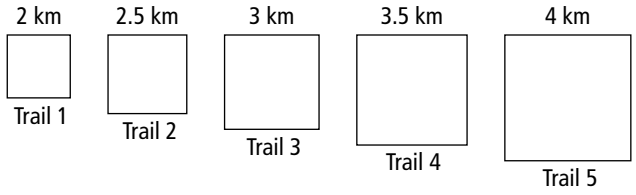
9. A cross-country ski park has 5 different trails. Each trail is in the shape of a square. The diagrams show the length of 1 side of the trail.



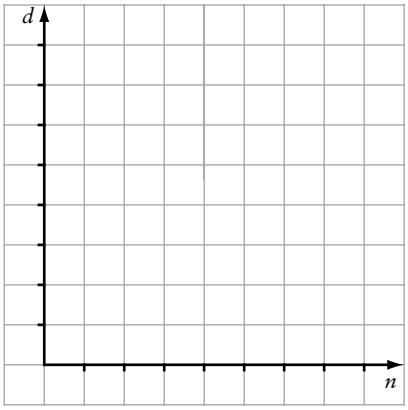
a) Complete the table of values to show the relationship between the trail number and the total distance of each trail.

Trail Number, n	Total Distance, d
1	
2	
3	
4	
5	

Find the perimeter of each square.

b) Complete the equation that represents this relation: $d =$ _____ $n +$ _____

c) Graph the linear relation.



d) If a sixth trail was added, what would be its total distance? _____