

Name \_\_\_\_\_

## Equations and Tables & Number Patterns

1. a. Complete the table below.

<b>x</b>	<b>y</b>
-2	-7
-1	-2
0	3
1	8
2	
3	
4	

- b. Which of the following equations matches the table above?

- A.  $y = x + 8$
- B.  $y = -2x - 7$
- C.  $y = 5x + 8$
- D.  $y = 5x + 3$

2. Given the equation  $y = -3x + 2$ , what numbers complete the x/y table?

x	y
-1	
0	
1	

- A. 2, -1, -4
- B. 5, 2, -1
- C. -1, 2, 5
- D. -3, 2, 5

3. What number comes next in this pattern?

3, 4, 6, 10, 18, ...

4. What number comes next?

1, 1, 2, 3, 5, 8, 13, ...

5. What is the missing number in this sequence?

5, 8, 14, \_\_\_\_\_, 50

6. What is the missing number in this sequence?

5, \_\_\_\_\_, 17, 23, 29

7. What number comes next in this sequence?

0.125, 0.25, 0.5, 1, ...

A. 1.25

B. 1.5

C. 2

D. 2.5

8. What two numbers come next in this sequence?

3, 4, 6, 10, 18, ...

A. 24, 52

B. 28, 56

C. 30, 58

D. 34, 66

9. Fill in the table using the equation:  $y = \frac{2}{3}x - 4$

x	y
-3	
0	
3	

10.  $y = -5x + 3$  Is  $(-4, -17)$  a solution?

11.  $y = \frac{1}{2}x - 2$  Is  $(10, 3)$  a solution?

12.  $y = -\frac{5}{6}x + 8$  What is the value of  $y$  when  $x = -18$ ?

## Equations and Tables & Number Patterns Answers

1. a. Complete the table below.

<b>x</b>	<b>y</b>
-2	-7
-1	-2
0	3
1	8
2	13
3	18
4	23

- b. Which of the following equations matches the table above?

- A.  $y = x + 8$
- B.  $y = -2x - 7$
- C.  $y = 5x + 8$
- D.  $y = 5x + 3$

2. Given the equation  $y = -3x + 2$ , what numbers complete the x/y table?

x	y
-1	
0	
1	

- A. 2, -1, -4
- B. 5, 2, -1
- C. -1, 2, 5
- D. -3, 2, 5

3. What number comes next in this pattern?

3, 4, 6, 10, 18, ...

34

4. What number comes next?

1, 1, 2, 3, 5, 8, 13, ...

21

5. What is the missing number in this sequence?

5, 8, 14, \_\_\_\_\_, 50

26

6. What is the missing number in this sequence?

5, \_\_\_\_\_, 17, 23, 29

11

7. What number comes next in this sequence?

0.125, 0.25, 0.5, 1, ...

A. 1.25

B. 1.5

C. 2

D. 2.5

8. What two numbers come next in this sequence?

3, 4, 6, 10, 18, ...

A. 24, 52

B. 28, 56

C. 30, 58

D. 34, 66

9. Fill in the table using the equation:  $y = \frac{2}{3}x - 4$

x	y
-3	-6
0	-4
3	-2

10.  $y = -5x + 3$  Is  $(-4, -17)$  a solution? No

11.  $y = \frac{1}{2}x - 2$  Is  $(10, 3)$  a solution? Yes

12.  $y = -\frac{5}{6}x + 8$  What is the value of  $y$  when  $x = -18$ ?  $y = 23$