

6th Grade
April 27, 2021

Today we will:

-Present Function
Machines

-Work on study guide
and/or get binder
ready if any extra
time



HOMWORK:

Complete and check study
guide on my Weebly

Test and binder check
TOMORROW

ALEKS time and topics
due next Monday at 11:59PM





Name _____ Date Due _____
 6th GRADE STUDY GUIDE Unit 3 Functions and Inequalities
 Complete the work inside the boxes under the problem. Circle your answer.
 Check your answers on spxmath.weebly.com when finished. Test TOMORROW.

1. Complete the function table by following the rule.

| input (n) | output ($7 - n$) |
|---------------|----------------------|
| 2 | <input type="text"/> |
| 4 | <input type="text"/> |
| 5 | <input type="text"/> |

2. Find the rule for the table.

| x | <input type="text"/> |
|-----|----------------------|
| 6 | 3 |
| 12 | 6 |
| 18 | 9 |

3. Find the rule for the table.

| n | <input type="text"/> |
|-----|----------------------|
| 2 | 4 |
| 4 | 6 |
| 8 | 10 |

4. Find the value of the seventh term in the sequence.

| Position | 1 | 2 | 3 | 4 | n |
|---------------|---|---|---|---|----------------------|
| Value of Term | 4 | 5 | 6 | 7 | <input type="text"/> |

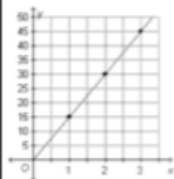
5. Complete the sequence.

4, 7, 10, _____, _____, 19

6. Complete the sequence.

2.5, 5, 7.5, _____, _____

7.



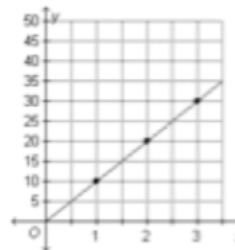
Stacy wants to make a function table for the input-output values in the graph. What output values can she enter to complete the table?

| | | | | |
|-------------|---|----------------------|----------------------|----------------------|
| Input, x | 0 | 1 | 2 | 3 |
| Output, y | 0 | <input type="text"/> | <input type="text"/> | <input type="text"/> |

8. What equation represents the function below?

| | | | | | |
|-------------|---|----|----|----|----|
| Input, x | 0 | 1 | 2 | 3 | 4 |
| Output, y | 8 | 13 | 18 | 23 | 28 |

9. Write an equation for the graph.

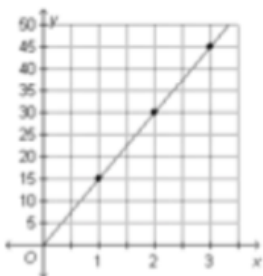


10.

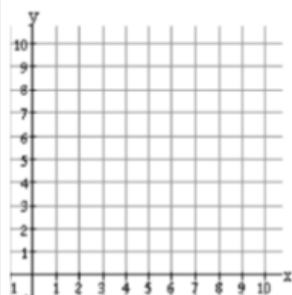
The table shows how far Marissa rides her bike after different amounts of time. At this rate, how far will she ride in 20 seconds?

| | | | | | | | | |
|---------------|----|-----|-----|-----|-----|----------------------|----------------------|----------------------|
| Time (sec) | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| Distance (ft) | 90 | 120 | 150 | 180 | 210 | <input type="text"/> | <input type="text"/> | <input type="text"/> |

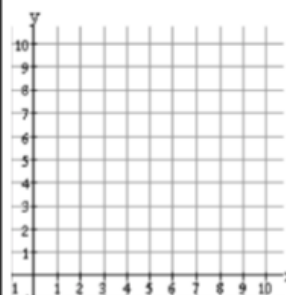
11. Write an equation for the graph.



12. Graph $y = 3x$.



13 Graph $y = 0.5x + 3$



14.

Chris is building a brick wall for his garden. It takes him 18 bricks to complete a single row. Complete the function table to show the relationship between the number of bricks b that it takes to make r rows.

| Rows, r | Bricks, b |
|-----------|-------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

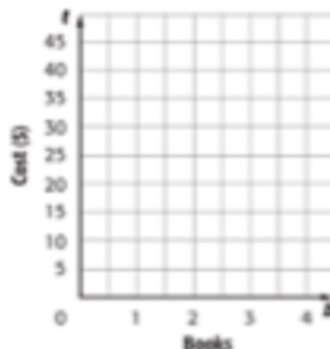
15. The school library is buying new books that cost \$9 each.





Make a function table to show the relationship between the number of books b and the total cost t .

| Books (b) | Total Cost (t) |
|---------------|--------------------|
| | |
| | |
| | |
| | |

Write an equation to find t , the total cost in dollars for any number of books b .

Graph the ordered pairs. Describe the graph.



| | | |
|--|---|---|
| <p>1. Determine which number is a solution of the inequality.</p> $n - 2 < 3; \quad 4, 5, 6$ | <p>2. Determine which number is a solution of the inequality.</p> $10 - f < 7; \quad 2, 3, 4$ | <p>3. Determine which number is a solution of the inequality.</p> $16 + j \geq 29; \quad 11, 12, 13$ |
| <p>4. Is the given value a solution of the inequality?</p> $9x \geq 80; \quad x = 9$ | <p>5. Is the given value a solution of the inequality?</p> $15 \leq 3z; \quad z = 4$ | <p>6. Is the given value a solution of the inequality?</p> $2n > 26; \quad n = 5$ |
| <p>7. Graph the inequality on a number line.</p> $x \leq 14$  | <p>8. Graph the inequality on a number line.</p> $f \geq 4$  | <p>9. Graph the inequality on a number line.</p> $y > 18$  |
| <p>10. Graph the inequality on a number line.</p> $m < 3$  | | |

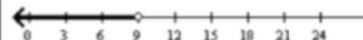
11. Write an inequality for this sentence:

The light bulb must be at least 60 watts.

12. Write an inequality for each sentence.

The scale can hold no more than 375 pounds.

13. Write an inequality for the graph.



14. Write an inequality for the graph.



15. Solve the inequality . Graph the solution on a number line.



16. Solve the inequality . Graph the solution on a number line.



17. Solve the inequality . Graph the solution on a number line.



18. Solve the inequality . Graph the solution on a number line.

