

Worksheet 5: Functions with Tables

Name: _____ Date: _____

Instructions

- Read each question carefully
- Choose the best answer
- Circle the letter of your choice
- Only one answer per question

1. Look at this table. What is $f(2)$?

| | | | | |
|--------|---|---|----|----|
| x | 1 | 2 | 3 | 4 |
| $f(x)$ | 5 | 8 | 11 | 14 |

A) 2
B) 5
C) 8
D) 11

2. Using the same table above, what is the value of x when $f(x) = 11$?

A) 1

B) 2

C) 3

D) 4

3. What pattern do you see in the table above?

A) $f(x)$ decreases by 3 each time

B) $f(x)$ increases by 3 each time

C) $f(x)$ doubles each time

D) $f(x)$ stays the same

4. Which table represents a linear function?

A) $x: 1, 2, 3, 4$ and $y: 2, 4, 8, 16$

B) $x: 1, 2, 3, 4$ and $y: 3, 5, 7, 9$

C) $x: 1, 2, 3, 4$ and $y: 1, 4, 9, 16$

D) $x: 1, 2, 3, 4$ and $y: 2, 3, 5, 8$

5. Look at this table. If the pattern continues, what would $f(5)$ be?

| | | | | |
|--------|----|---|---|---|
| x | 1 | 2 | 3 | 4 |
| $f(x)$ | 10 | 8 | 6 | 4 |

A) 0

B) 2

C) 6

D) 12

6. In the table below, what is the rate of change?

| | | | | |
|---|---|---|----|----|
| x | 0 | 1 | 2 | 3 |
| y | 4 | 7 | 10 | 13 |

A) 3

B) 4

C) 7

D) 1

7. Which table shows a function where y decreases as x increases?

A) x: 1, 2, 3 and y: 5, 6, 7

B) x: 1, 2, 3 and y: 8, 5, 2

C) x: 1, 2, 3 and y: 3, 3, 3

D) x: 1, 2, 3 and y: 1, 4, 9

8. If a table shows that when x = 0, y = 5, what does this represent?

A) The slope

B) The x-intercept

C) The y-intercept

D) The maximum

9. Look at this input-output table. What rule could describe this function?

| | | | | |
|------------|---|---|----|----|
| Input (x) | 1 | 2 | 3 | 4 |
| Output (y) | 4 | 8 | 12 | 16 |

A) $y = x + 3$

B) $y = 4x$

C) $y = x^2$

D) $y = 2x + 2$

10. A table shows the cost of buying movie tickets. If 1 ticket costs \$12 and 2 tickets cost \$24, what would 5 tickets cost?

A) \$36

B) \$48

C) \$60

D) \$72