

Algebra 1
Interpreting Function Notation

Function Notation and Interpretation | A1-U04-P03

96 problems · Four activity formats

01	Answer Bank Challenge	24 tasks
02	Grid Rounds	24 tasks
03	Match & Move	24 cards
04	Error Analysis & Strategy	24 tasks
05	Quick Answer Key	96 answers
06	Full Worked Solutions	96 solutions
07	Teacher / Parent Use Guide	included
08	Terms of Use & License	included

Topic focus
Across 96 tasks this topic asks for notation statement or semantic interpretation.
8 PDFs and a README; 52 buyer pages.

Algebra 1

Interpreting Function Notation

Name: _____ Date: _____ Class: _____

Answer each question and record the matching bank letter. Give exact values. A value without its unit is not a complete answer.

The argument is an identifier, not a measurement. Interpret $M(204) = 57$. $M(i)$ is mass in grams of package with item code i. _____ Bank label: _____	Name the given quantity and requested quantity in the ticket instruction. $C(n)$ is cost for n tickets. The instruction is "Find $C(5)$." _____ Bank label: _____
The number 3 appears among known outputs. Does that make $p(3)$ defined? The declared domain is $\{2, 4, 6\}$. _____ Bank label: _____	What does $P(0) = 4$ reveal about this parking charge? $P(n)$ is parking charge in dollars for n completed hours. _____ Bank label: _____
Check the endpoint, a non-whole value, and an over-limit value. The declared domain is whole numbers from 0 through 12 inclusive. Consider the given statements $P(12), P(12.5), P(13)$. _____ Bank label: _____	What is supplied and what is sought in 'determine $R(a + 1)$'? _____ Bank label: _____
Read $R(12) = 0.35$ without interpreting 12 as a count of red pieces $R(k)$ is the ratio of red pieces to all pieces in sample k. _____ Bank label: _____	Identify the role of $b + 3$ without solving the equation. The instruction is "Solve $T(x) = b + 3$ for the possible x-values." _____ Bank label: _____

Algebra 1

Interpreting Function Notation

Name: _____ Date: _____ Class: _____

Answer each question and show your reasoning in the workspace. Give exact values rather than decimals unless the question supplies a decimal. A value without its unit is not a complete answer.

Use east-positive input and upward-positive output conventions $e(x)$ is elevation change in meters at x kilometers east of camp. Two kilometers west of camp, elevation is 11 meters lower than at camp.	Resolve the date offset and measurement in $R(-3) = 0.8$. $R(d)$ is rainfall in millimeters on the day d days relative to July 10.
Interpret $I(6) = 24$ using both measurement units. $I(d)$ is light intensity in lumens at depth d meters.	Treat the coordinate label as one argument and encode the reading. $Z(i)$ is pressure in kilopascals for sensor position i, where an ordered pair labels a position. Sensor position $(2, -1)$ reads 98 kilopascals.
Describe what happens after f receives a in $3(f(a) - 2)$.	Separate the roles in the two stages before any calculation. The two instructions are: First report $S(0)$. Then identify every t with $S(t) = S(0)$.

Algebra 1

Interpreting Function Notation

Name: _____ Date: _____ Class: _____

Begin at START. Answer the card, then find the matching final answer at the top of another card. Use the recording sheet for your reasoning. Visit each card once and continue to FINISH.

Incoming: Exchanging 50 US dollars yields 7,250 yen. Use the row with input 5 to write one equation for w. <table border="1" data-bbox="151 527 797 651"> <thead> <tr> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>-3</td> <td>9</td> </tr> <tr> <td>0</td> <td>2</td> </tr> <tr> <td>5</td> <td>-6</td> </tr> </tbody> </table> Your response: _____	Input	Output	-3	9	0	2	5	-6	Incoming: $w(5) = -6$. Treat each coordinate pair as one input object and classify both expressions. The declared domain is $\{(0, 0), (1, 2)\}$. Consider the given statements $V((1, 2)), V(1)$. Your response: _____
Input	Output								
-3	9								
0	2								
5	-6								
Incoming: $Q(3)$ and $Q(3.0)$ are undefined; $Q(-3)$ is defined State the exchange direction encoded by $Y(50) = 7250$. $Y(d)$ is yen received when d US dollars are exchanged. Your response: _____	Incoming: $(6, -11)$. Encode the instantaneous rate observation. $r(t)$ is speed in meters per second at time t seconds. At 4 seconds, the speed is 7.5 meters per second. Your response: _____								
Incoming: Divide n by 2 first and use $\frac{n}{2}$ as q's input. Convert the date to an offset and write the function statement. $R(d)$ is rainfall in millimeters d days relative to September 10. On September 13, rainfall is 4.6 millimeters. Your response: _____	Incoming: $(-2, 5)$. What graph point is represented by $m(3) = 3$? Your response: _____								

Algebra 1

Interpreting Function Notation

Name: _____ Date: _____ Class: _____

Evaluate the supplied statement or method. Say whether it is correct, repair it if it is not, and verify the result exactly. Not every prompt contains an error.

Choose an efficient method, explain why it fits the given representation, and then complete the task exactly. Convert the graph-membership sentence to function notation.

Use the function N . The given statement is The point $(c, -d)$ is on the graph of N .

Complete the task, then compare the direct formula approach with an equivalent check. Explain why both support the same conclusion. State the generic ordered-pair form conveyed by $h(n) = 2n + 1$.

Choose an efficient method, explain why it fits the given representation, and then complete the task exactly. Write the table association $\text{small} \rightarrow \text{blue}$ using function C .

Input	Output
small	blue

Choose an efficient method, explain why it fits the given representation, and then complete the task exactly. Ignore the record ID and use the semantic headers to encode the row for Q .

Q-value	input	record ID
-8	3	R17

Interpreting Function Notation

Full Worked Solutions - excerpt

Worked example

Problem. The argument is an identifier, not a measurement. Interpret $M(204) = 57$.

$M(i)$ is mass in grams of package with item code i .

Answer. The package with item code 204 has a mass of 57 grams.

Explanation and check.

Code 204 selects the item; 57 grams is its measured output.

Worked example

Problem. Name the given quantity and requested quantity in the ticket instruction.

$C(n)$ is cost for n tickets. The instruction is "Find $C(5)$."

Answer. The count 5 tickets is given; the cost output is requested.

Explanation and check.

C takes ticket count as input and returns cost.