Is it a function? Pairs, tables, mappings and graphs worksheet – Grade 8

Grade 8 · Mixed level · 20 questions · **Version X9584**

Name: _____ Date: _____ Score: ___ / 20

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1. Is the relation {(5, −6), (−4, −2), (−4, 7), (0, 9)} a function?

   A. Yes **B.** No

2. Does the table show a function?

x	5	−3	1	1	3
y	5	−6	3	−1	2

   A. Yes **B.** No

3. Is the relation {(5, 2), (4, 2), (−1, 5), (0, 1), (6, −5)} a function?

   A. Yes **B.** No

4. Does the table show a function?

x	3	−3	2	−3
y	−3	7	5	−1

   A. Yes **B.** No

5. Does the table show a function?

x	4	−2	−1	2	−1
y	0	5	6	7	−5

   A. Yes **B.** No

6. Is the relation {(−4, 9), (6, −5), (3, −5), (−3, 0), (6, −1)} a function?

   A. Yes **B.** No

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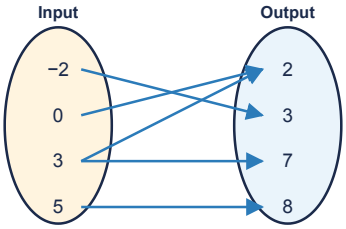
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7. Does the table show a function?

x	−2	3	3	4	0
y	6	6	−5	−3	5

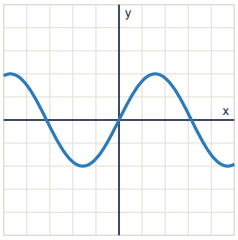
A. Yes **B.** No

8. Does the mapping diagram show a function?



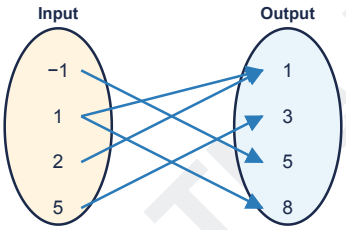
A. Yes **B.** No

9. Use the vertical line test. Is this graph a function?



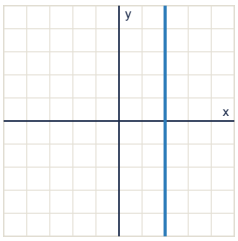
A. Yes **B.** No

10. Does the mapping diagram show a function?



A. Yes **B.** No

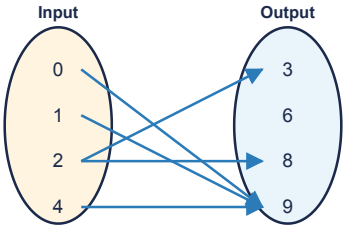
11. Use the vertical line test. Is this graph a function?



A. Yes **B.** No

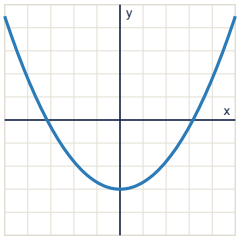
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12. Does the mapping diagram show a function?



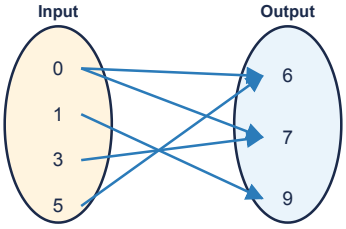
A. Yes **B.** No

13. Use the vertical line test. Is this graph a function?



A. Yes **B.** No

14. Does the mapping diagram show a function?



A. Yes **B.** No

15. The relation is {(−2, −4), (−3, 9), (6, −3), (k, 11)}. Which value of k would make it NOT a function?

A. −5 **B.** 10 **C.** 9 **D.** −3

16. Is this relation a function? Input → output: Each age → the people who are that age.

A. Yes **B.** No

17. Which relation is a function?

A. {(0, −1), (−3, −4), (−2, −6), (−3, 1)} **B.** {(−2, 2), (−3, 4), (−3, −3), (4, −5)}

C. {(−4, 1), (0, 1), (−3, 7), (4, 9)} **D.** {(3, 7), (0, 2), (0, −6), (1, 5)}

18. Which relation is NOT a function?

A. {(1, −4), (−2, 4), (3, 9), (2, 0)} **B.** {(−4, 9), (−1, 5), (−3, −6), (2, −5)}

C. {(2, 2), (6, −2), (−2, −5), (2, 3)} **D.** {(0, 2), (−3, 2), (−2, 1), (3, 9)}

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19. Which relation is NOT a function?

A. {(4, 8), (5, 4), (−2, 2), (4, 0)} **B.** {(−1, −2), (4, 9), (2, 8), (5, −1)}

C. {(−2, 2), (4, −5), (−4, 3), (−1, 9)} **D.** {(−2, 5), (−3, 7), (6, 0), (3, 3)}

20. The relation is {(−2, −6), (5, 4), (2, 7), (k, 5)}. Which value of k would make it NOT a function?

A. 5 **B.** 7 **C.** 9 **D.** 8

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Answer key · Version X9584

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1. **B (No)**
2. **B (No)**
3. **A (Yes)**
4. **B (No)**
5. **B (No)**
6. **B (No)**
7. **B (No)**
8. **B (No)**
9. **A (Yes)**
10. **B (No)**
11. **B (No)**
12. **B (No)**
13. **A (Yes)**
14. **B (No)**
15. **D (−3)**
16. **B (No)**
17. **C ({(−4, 1), (0, 1), (−3, 7), (4, 9)})**
18. **C ({(2, 2), (6, −2), (−2, −5), (2, 3)})**
19. **A ({(4, 8), (5, 4), (−2, 2), (4, 0)})**
20. **A (5)**

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