Relations and Functions: Linear Relations and Functions — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **For the linear relation y = 2x + 3 the value of y when x = 4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **For the linear relation y = 2x + 3 the value of x when y = 11 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **If f(x) = 2x + 1 then f(5) is**

- A 11
- B 10
- C 7
- D 12

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4 **In the relation y = 2x + 3 the slope is**

- A 2
- B 3
- C 5
- D 6

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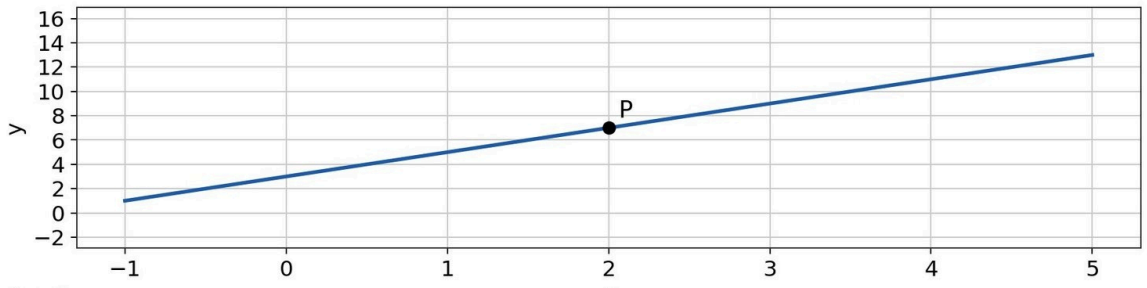
5 **In the relation y = 2x + 3 the y intercept is**

- **A** 2
- **B** 3
- **C** 5
- **D** 6

Understand It with Pulse | Flag a mistake

6 **The graph of y = 2x + 3 passes through the point with x = 2 . The y value is**



ANSWER

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7 **A discrete graph shows points that are**

A connected by a line

B always curved

C separate

D always circles

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8 **A graph passes the vertical line test when no vertical line crosses it**

A at all

B more than once

C exactly twice

D only at the origin

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9 **A line with a negative slope falls from left to**

A left

B up only

C right

D nowhere

Understand It with Pulse | Flag a mistake

10 **A line with a positive slope rises from left to**

A left

B right

C down only

D nowhere

Understand It with Pulse | Flag a mistake

11 **A linear relation has a graph that is a**

A straight line

B curve

C circle

D parabola only

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12 **A relation is a function when each input has**

A two outputs

B no output

C exactly one output

D many inputs only

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13 **A relation that is not a function has an input with**

- A exactly one output
- B no input
- C more than one output
- D a slope of zero

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14 **A table of values for a linear relation shows outputs that change by a**

- A random amount
- B squared amount
- C doubled amount each time only
- D constant amount

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15 **In function notation f(3) means the output when the input is**

A f

B 0

C 3

D the slope

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16 **The domain of a relation is the set of**

A output values

B slopes

C intercepts

D input values

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17 **For the linear relation y = 3x + 1 the value of y when x = 5 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **For the linear relation y = 3x + 1 the value of x when y = 13 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **If f(x) = 3x - 2 then f(4) is**

A 12

B 10

C 9

D 14

Understand It with Pulse | Flag a mistake

20 **In the relation y = 4x - 1 the slope is**

A 4

B -1

C 3

D 5

Understand It with Pulse | Flag a mistake

21 **In the relation y = 4x - 1 the y intercept is**

A 4

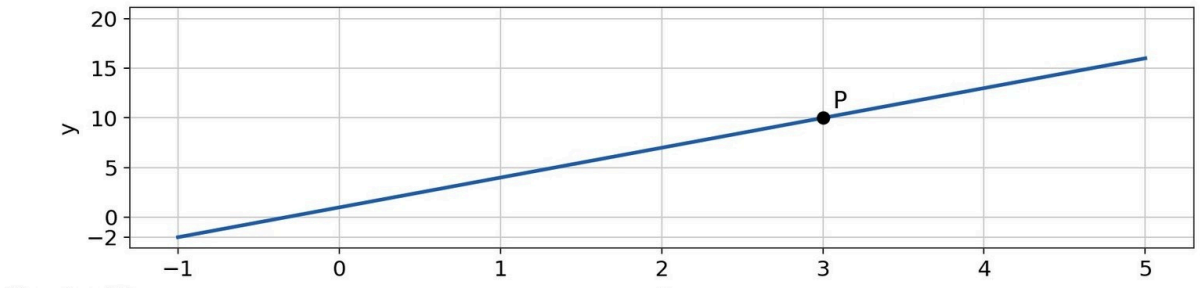
B -1

C 3

D 5

Understand It with Pulse | Flag a mistake

22 The graph of y = 3x + 1 passes through the point with x = 3 . The y value is



ANSWER _____

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23 For the linear relation y = 1x + 5 the value of y when x = 6 is

ANSWER _____

Understand It with Pulse | Flag a mistake

24 For the linear relation y = 1x + 4 the value of x when y = 9 is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 For the linear relation y = 4x + 2 the value of y when x = 3 is

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 11
2. 4
3. A
4. A
5. B
6. 7
7. C
8. B
9. C
10. B
11. A
12. C
13. C
14. D
15. C
16. D
17. 16
18. 4
19. B
20. A
21. B
22. 10
23. 11
24. 5
25. 14

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