

Algebra 1 - Writing Linear Equations and Functions - Test

Common Core F-LE.A.2, F-BF.A.1a, A-CED.A.2 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

Take this 20-point, 45-minute test to measure your skill with writing linear equations and functions (F-LE.A.2, F-BF.A.1a, and A-CED.A.2). Read each question carefully, show your work, and check units and signs before you move on. If you get stuck, skip the question and return to it at the end.

About this test

- Grade: Algebra 1
- Chapter: Writing Linear Equations and Functions
- Standards: F-LE.A.2, F-BF.A.1a, A-CED.A.2
- Time: 45 minutes
- Total: 20 points

Question 1 - Slope-intercept form [2 pts]

Write an equation in slope-intercept form.

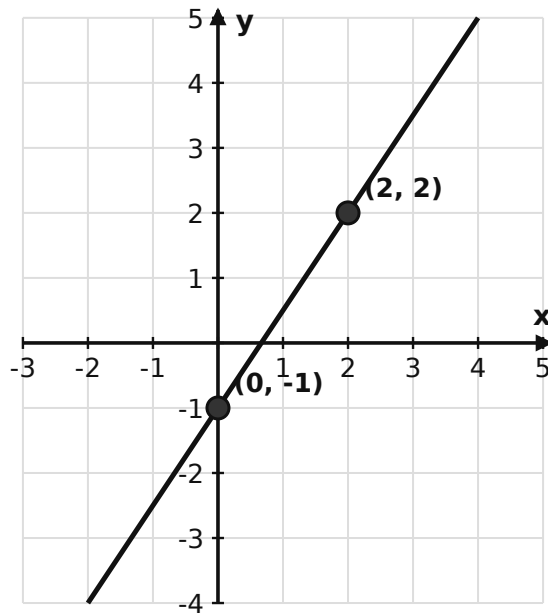
- Slope 5, y-intercept -1 . (1 point)
- Slope $-\frac{1}{3}$, passes through $(0,4)$. (1 point)

Question 2 - Point-slope [2 pts]

A line has slope 4 and passes through $(-1,6)$. Write its equation in point-slope form and slope-intercept form.

Question 3 - Two points [2 pts]

Write the equation of the line through $(2,-3)$ and $(6,5)$.

Question 4 - Equation from a graph [2 pts]

Graph for question 4.

Write the equation of the line shown.

Question 5 - Equation from a table [2 pts]

x	1	3	5
y	5	13	21

Table for question 5.

The table shows a linear function. Write its equation.

Question 6 - Parallel line [2 pts]

Write the equation of the line through $(2, 5)$ that is parallel to $y = -3x + 1$.

Question 7 - Perpendicular line [3 pts]

A line is perpendicular to $y = 3x - 4$ and passes through $(6, 2)$.

- a. State its slope. (1 point)
- b. Write its equation in slope-intercept form. (2 points)

Question 8 - Taxi fare model [3 pts]

Miles	Fare
4	\$13
10	\$28

Two taxi rides.

A taxi fare is linear in the miles driven. Two fares are shown in the table.

- a. Find the cost per mile. (1 point)
- b. Write an equation for the fare C for m miles. (1 point)
- c. Find the fare for 15 miles. (1 point)

Question 9 - Standard form [2 pts]

Write $y = -\frac{3}{5}x + 4$ in standard form with integer coefficients.