

Writing and Graphing Equations in Slope-intercept Form

Slope-intercept Form: $y = mx + b$

$m = \text{slope}$
(rate of change)

$b = \text{y-intercept}$
(starting point)

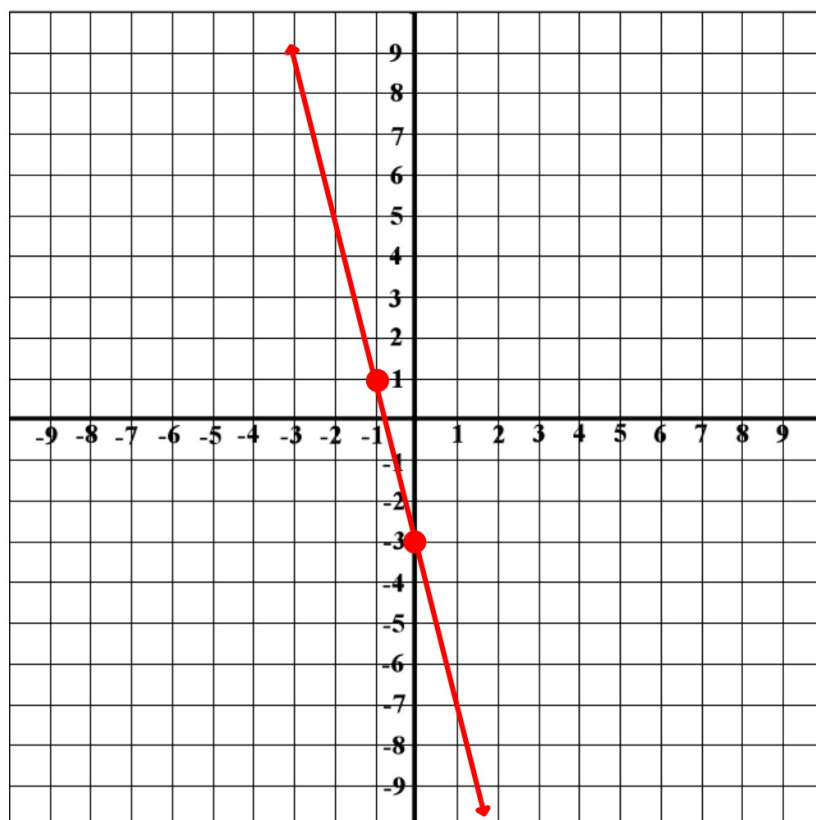
NEXT/NOW : NEXT = NOW + **slope** starting at **y-int**

Write an Equation give the slope and the y-int in slope intercept and NEXT/NOW form.

1) slope: 4; y-int: 3

2) slope: $-\frac{1}{4}$; y-int: -8

3)



**4) You have saved \$150 toward the cost of a new TV.
You plan to save \$15 a week for the next several weeks**

5) To rent a car, you must pay \$200 plus \$0.75 per mile

6)

x	y
10	0
5	20
0	40
-5	60

7)

x	3	6	9	12
y	10	22	34	46

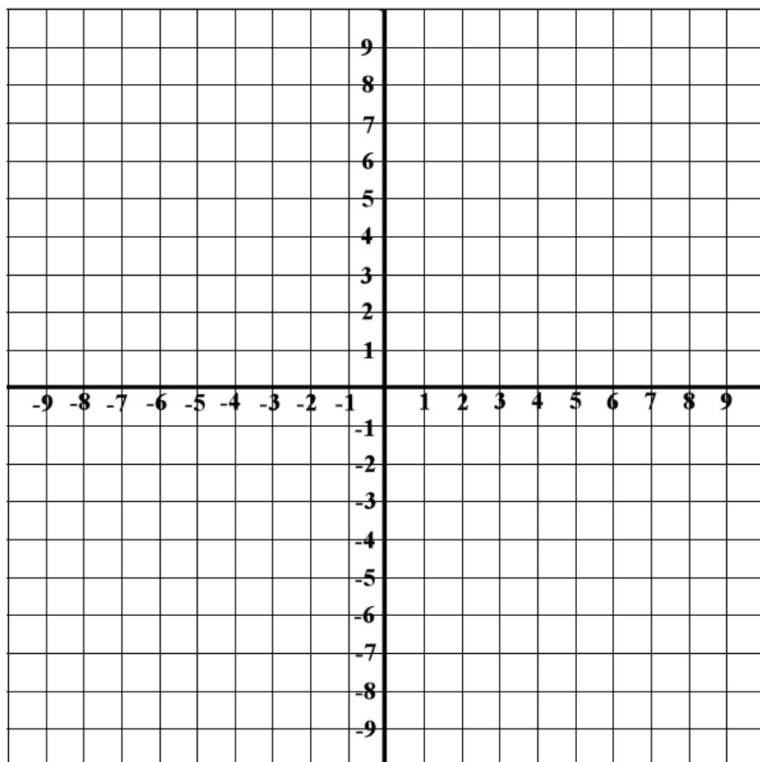
Graph.

1. $y = \frac{-2x}{3} + 1$

1) Solve for y

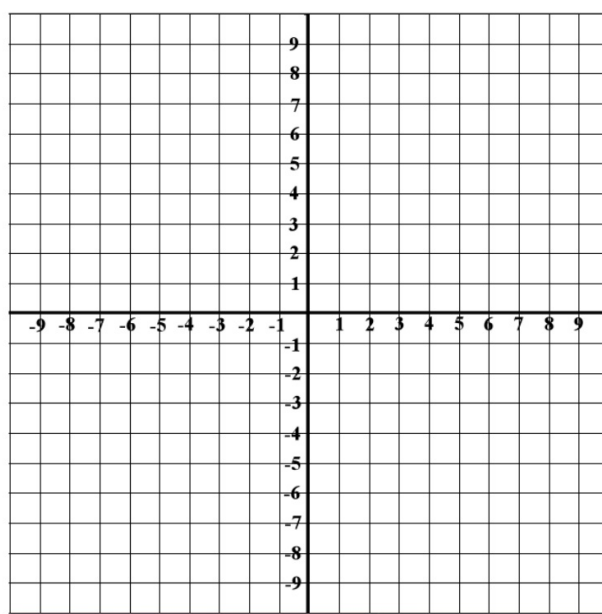
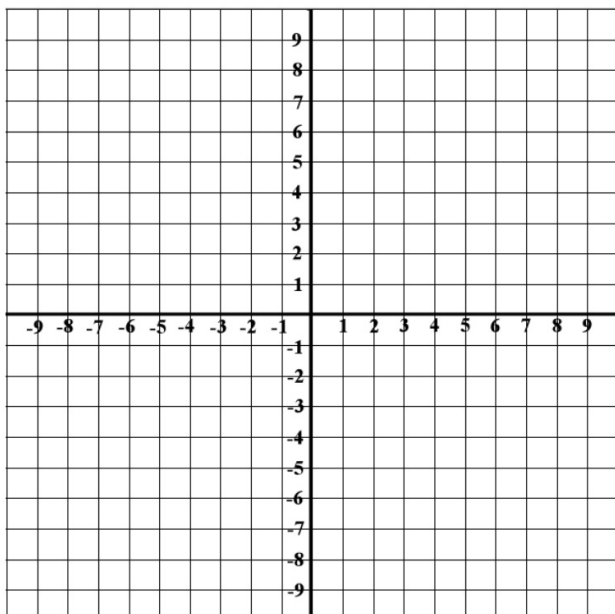
2) Plot y-intercept

3) From y-intercept
count slope
rise
run

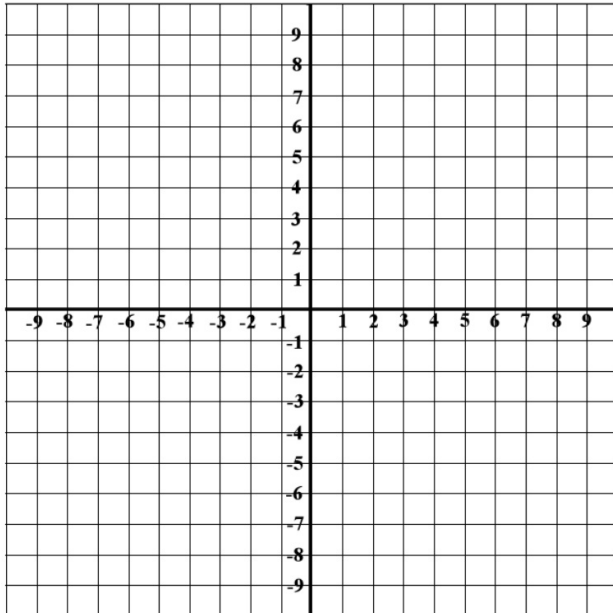


2. $y = 3x + 5$

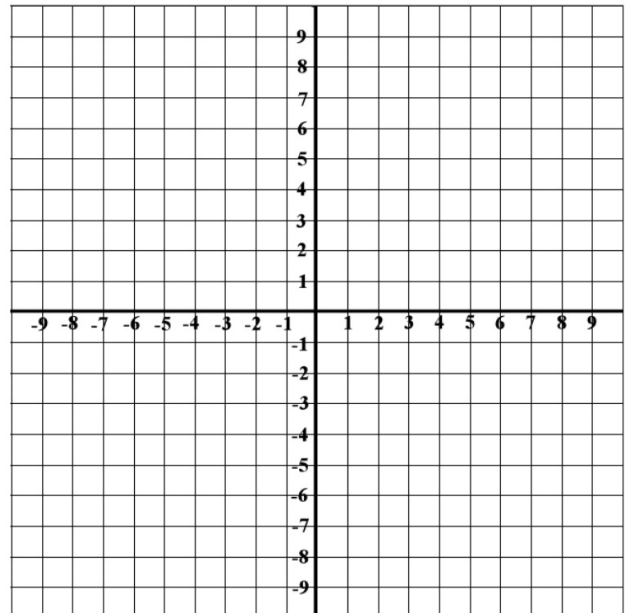
3. $y = \frac{5}{3}x -$



4. $y = 2x - 3$

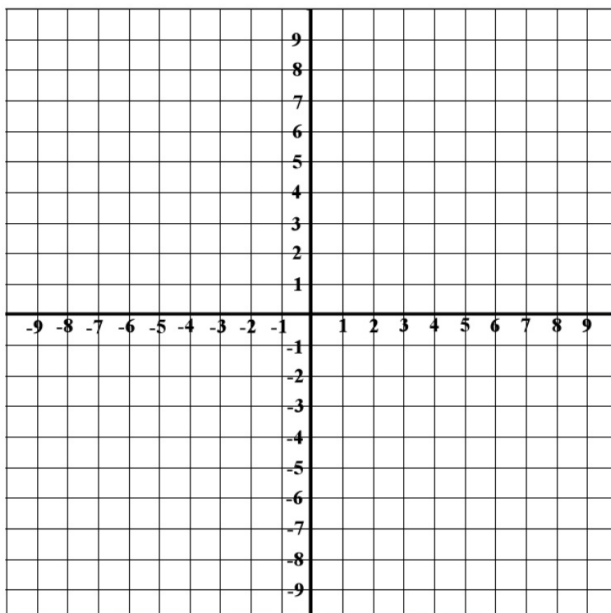


5. $y = 4$

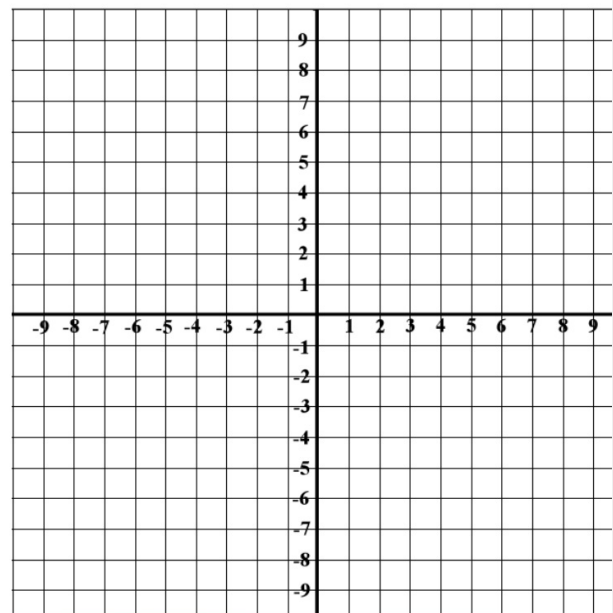


6. $x = -6$

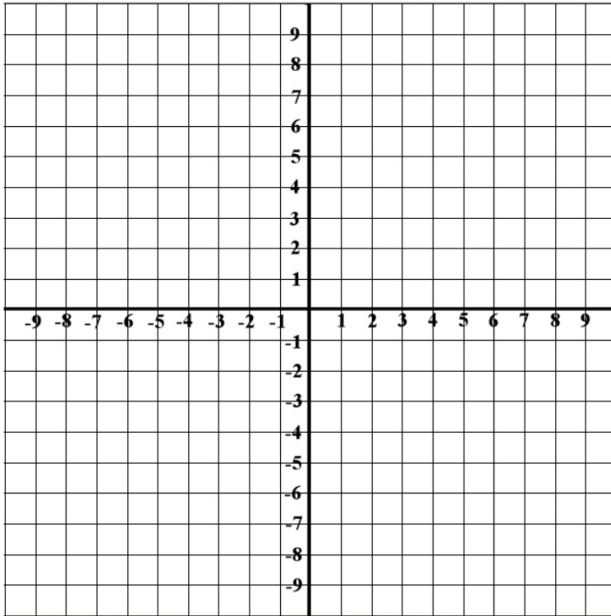
7. $x - 3y = 6$



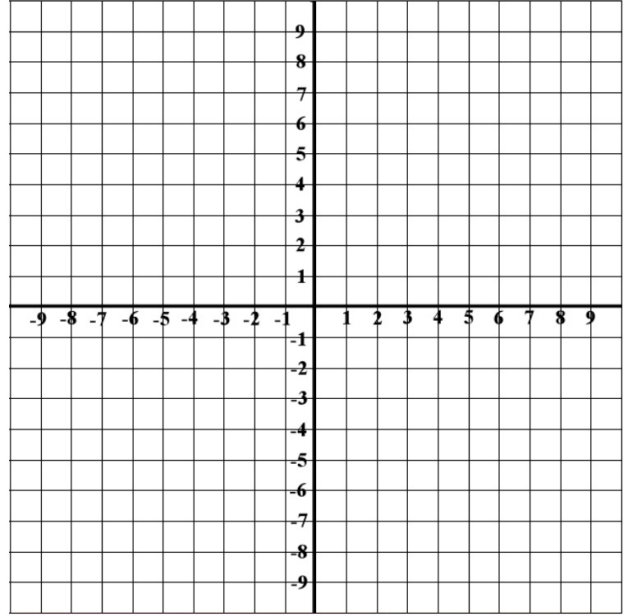
8. $2x + 5y = 15$



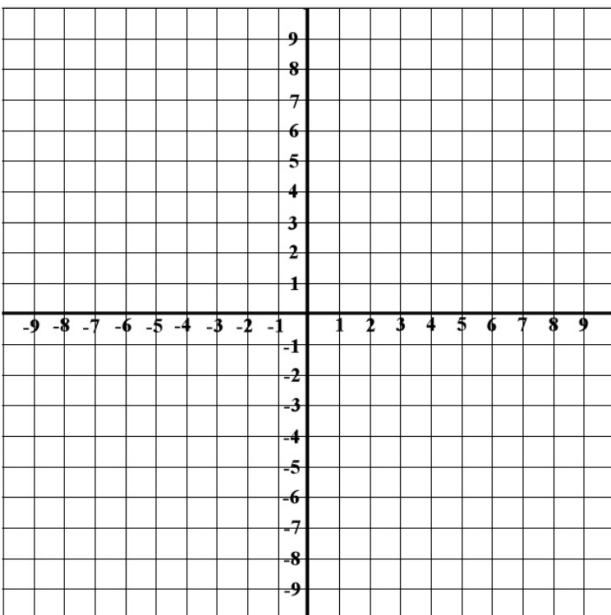
9. $5x = -10$



10. $(3, -2), m = 3$



11. $(-2, 5) m = \frac{3}{4}$



12. x-int = .
y-int =

