Unit 1B Day 2 Review Practice — Part A — Key

Slope and intercept, graphs, and point-slope form

Directions: Show work. Questions 1–3 review prerequisite skills.

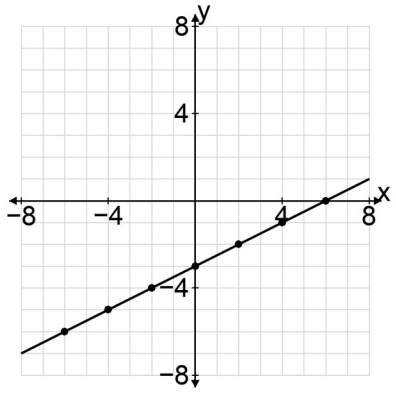
1. Find the slope through (−2, 1) and (2, 7). **Answer:** $m=\frac{7-1}{2-(-2)}=\frac{3}{2}$	**2.** Solve for y. $y-3=2(x+4)$ **Answer:** $y=2x+11$	**3.** Distribute. $-\frac{2}{3}(x-6)$ **Answer:** $-\frac{2}{3}x+4$
4. Write the equation. $m=\frac{2}{3},\ b=-5$ **Answer:** $y=\frac{2}{3}x-5$	**5.** Write the equation. $m=-\frac{1}{2},\ b=4$ **Answer:** $y=-\frac{1}{2}x+4$	**6.** Write the equation. $m=\frac{3}{4},\ b=-2$ **Answer:** $y=\frac{3}{4}x-2$
7. Write the equation. $m=-\frac{2}{5},\ b=1$ **Answer:** $y=-\frac{2}{5}x+1$	**8.** Write the equation. $m=\frac{5}{3},\ b=-6$ **Answer:** $y=\frac{5}{3}x-6$	**9.** Write the equation. $m=-\frac{3}{2},\ b=3$ **Answer:** $y=-\frac{3}{2}x+3$
10. Write a line through (−3, 2) with slope $m=4$. **Answer:** $y-2=4(x+3)$ $y-2=4x+12$ $y=4x+14$	**11.** Write a line through (2, −5) with slope $m=-3$. **Answer:** $y+5=-3(x-2)$ $y+5=-3x+6$ $y=-3x+1$	**12.** Write a line through (−4, 3) with slope $m=2$. **Answer:** $y-3=2(x+4)$ $y-3=2x+8$ $y=2x+11$

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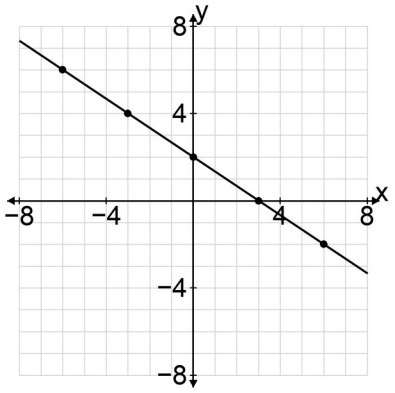
Directions: Show work. Simplify equations to slope-intercept form and include units in word problems.

13. Write the equation.
State the slope and y-intercept.



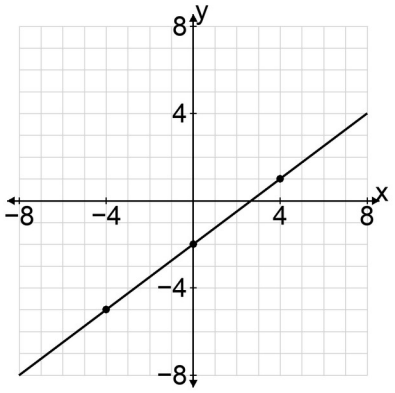
$m=\frac{1}{2},\ b=-3,\ y=\frac{1}{2}x-3$

14. Write the equation.
State the slope and y-intercept.



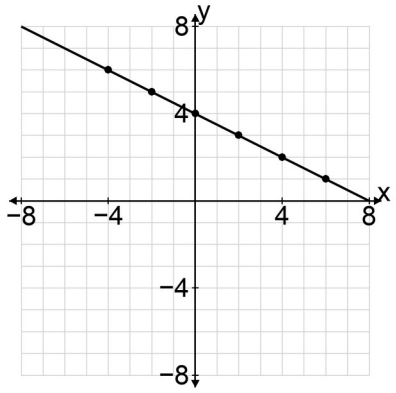
$m=-\frac{2}{3},\ b=2,\ y=-\frac{2}{3}x+2$

15. Write the equation.
State the slope and y-intercept.



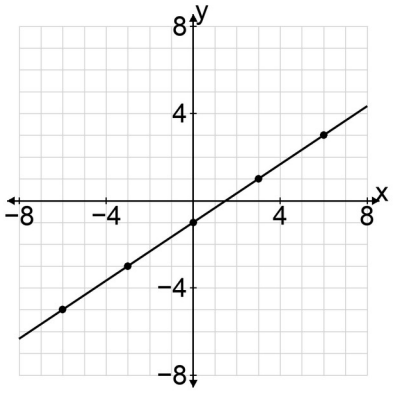
$m=\frac{3}{4},\ b=-2,\ y=\frac{3}{4}x-2$

16. Write the equation.
State the slope and y-intercept.



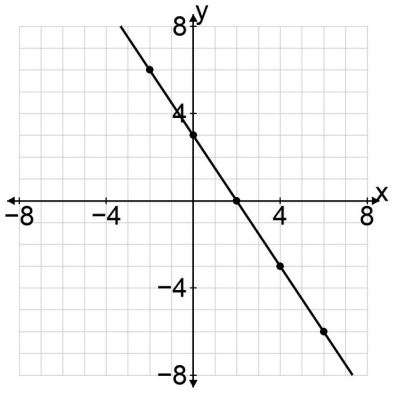
$m=-\frac{1}{2},\ b=4,\ y=-\frac{1}{2}x+4$

17. Write the equation.
State the slope and y-intercept.



$m=\frac{2}{3},\ b=-1,\ y=\frac{2}{3}x-1$

18. Write the equation.
State the slope and y-intercept.



$m=-\frac{3}{2},\ b=3,\ y=-\frac{3}{2}x+3$

19. Write a line through (3, 1) with slope $m=-2$.

Answer:

$y-1=-2(x-3)$

$y-1=-2x+6$

$y=-2x+7$

20. Write a line through (−2, 4) with slope $m=\frac{3}{2}$.

Answer:

$y-4=\frac{3}{2}(x+2)$

$y-4=\frac{3}{2}x+3$

$y=\frac{3}{2}x+7$

21. Write a line through (4, −1) with slope $m=-\frac{1}{2}$.

Answer:

$y+1=-\frac{1}{2}(x-4)$

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

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