

Notes 2-5

Int 2

Effects of m and b

Unit 2

Graph equations 1-3 on the same graph given to the right.

Given equation: $y = 2x + 3$ $m = \frac{2}{1}$ $b = 3$

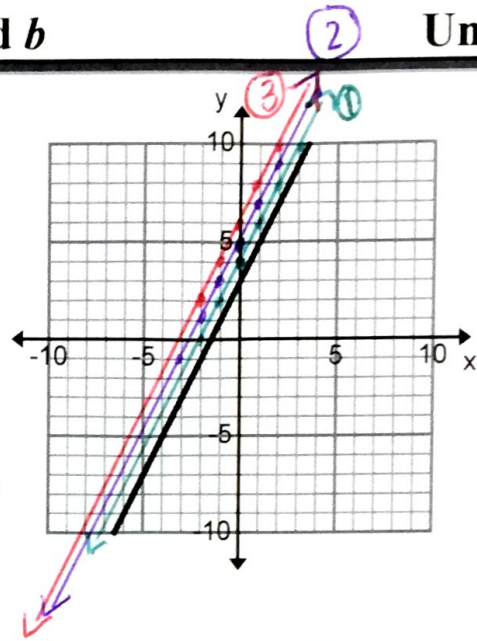
1. $y = 2x + 4$ $m = \frac{2}{1}$ $b = 4$

2. $y = 2x + 5$ $m = \frac{2}{1}$ $b = 5$

3. $y = 2x + 6$ $m = \frac{2}{1}$ $b = 6$

4. What was the effect on the graph as the equation changed?

y-int. changed, hit higher on the graph



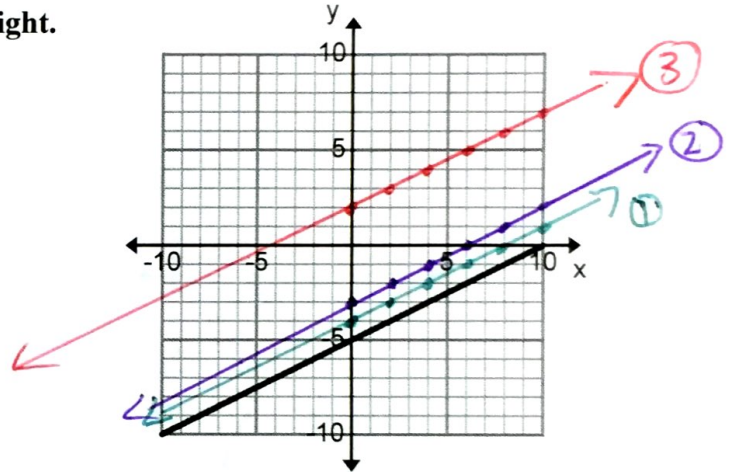
Graph equations 5-7 on the same graph given to the right.

Given equations: $y = \frac{1}{2}x - 5$

5. $y = \frac{1}{2}x - 4$ $m = \frac{1}{2}$ $b = -4$

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

7. $y = \frac{1}{2}x + 2$ $m = \frac{1}{2}$ $b = 2$



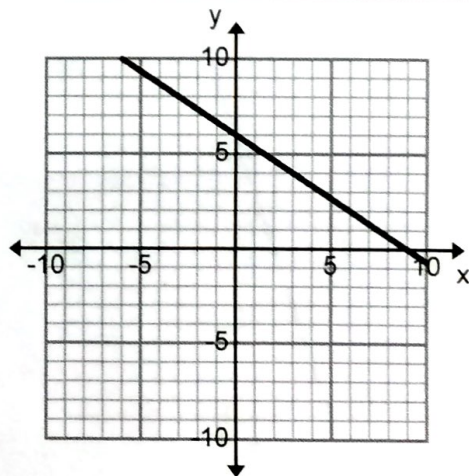
Graph equations 8-10 on the same graph given to the right.

Given equations: $y = -\frac{2}{3}x + 6$

8. $y = -\frac{2}{3}x + 5$

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

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



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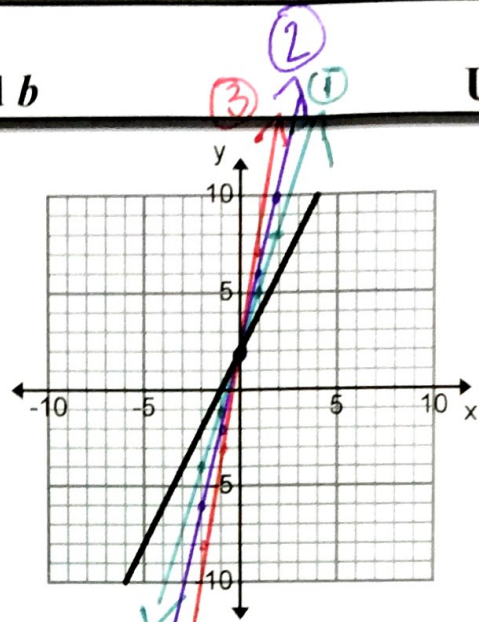
Graph equations 11-13 on the same graph given to the right.

Given equation: $y = 2x + 2$

- 11. $y = 3x + 2$ $m = \frac{3}{1}$ $b = 2$
- 12. $y = 4x + 2$ $m = \frac{4}{1}$ $b = 2$
- 13. $y = 5x + 2$ $m = \frac{5}{1}$ $b = 2$

14. What was the effect on the graph as the equation changed?

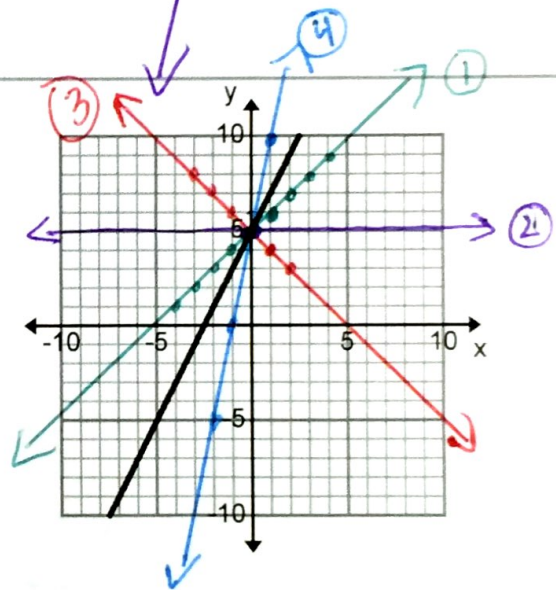
got steeper



Graph equations 15-18 on the same graph given to the right.

Given equation: $y = 2x + 5$

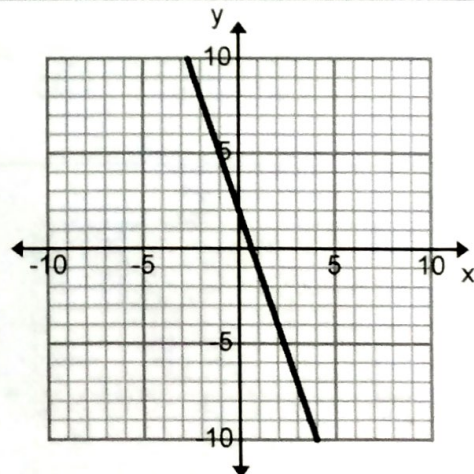
- 15. $y = \frac{1}{1}x + 5$ Slope: $\frac{1}{1}$
- 16. $y = 5$ Slope: 0
- 17. $y = -\frac{1}{1}x + 5$ Slope: $-\frac{1}{1}$
- 18. $y = \frac{5}{1}x + 5$ Slope: $\frac{5}{1}$



Graph equations 19-22 on the same graph given to the right.

Given equation: $y = -3x + 2$

- 19. $y = -2x + 2$ Slope: _____
- 20. $y = -x + 2$ Slope: _____
- 21. $y = 2$ Slope: 0
- 22. $y = 4x + 2$ Slope: _____



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Graph equations 23-25 on the same graph given to the right.

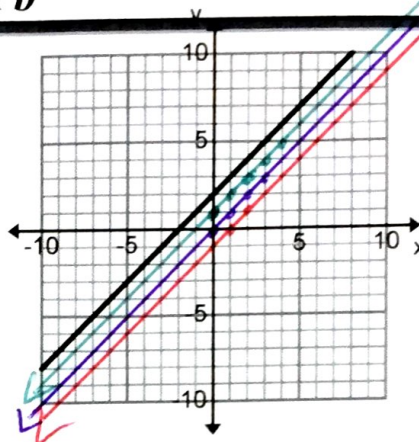
Given equation: $y = |x + 2|$

23. $y = |x + 1|$

24. $y = |x|$

25. $y = |x - 1|$

$m = \frac{1}{1}$ $b = 1$
 $m = \frac{1}{1}$ $b = 0$



Graph equations 26-28 on the same graph given to the right.

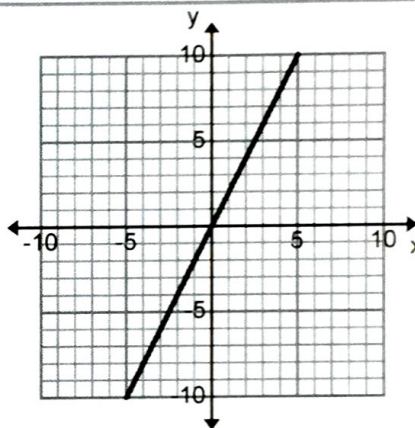
Given equation: $y = 2x + 0$

26. $y = 3x + 0$

27. $y = 4x + 0$

28. $y = -4x + 0$

$m = 3$ $b = 0$



Graph equations 29-31 on the same graph given to the right.

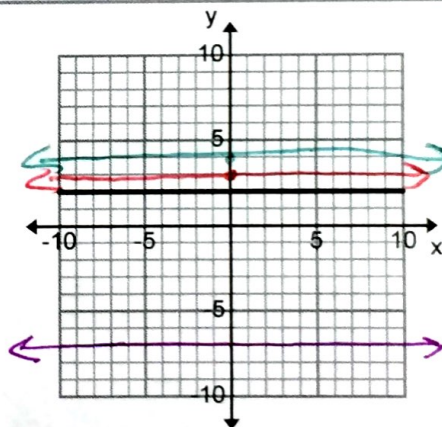
Given equation: $y = 2$

29. $y = 3$

30. $y = 4$

31. $y = -7$

$m = 0$ $b = 3$



Graph equations 32-34 on the same graph given to the right.

Given equation: $y = -x + 3$

32. $y = -x + 2$

33. $y = -x + 1$

34. $y = -x$

