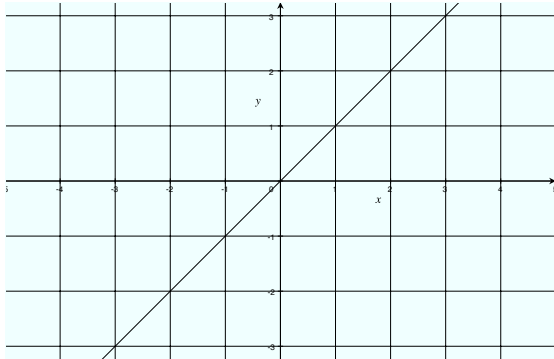


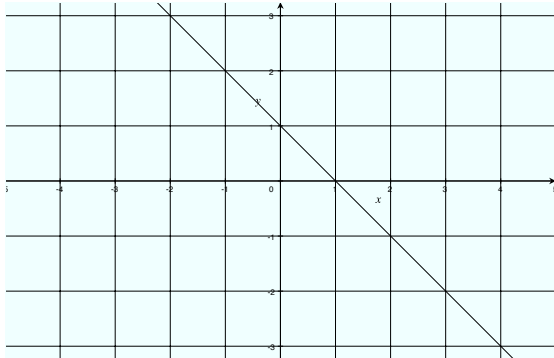
Finding Equations of Lines

Find, in the form $y = mx + c$, the equations of the following lines. Before doing anything else, decide if the gradient is *positive* or *negative*. Then look for a pair of “integer points” such as $(1, -3)$ or $(-2, 3)$. Then work out the gradient by “rise over run” (a.k.a. change in y over change in x).

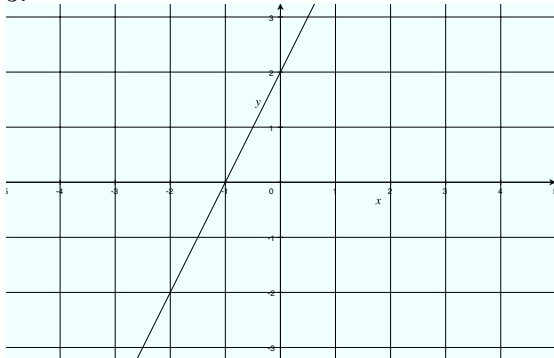
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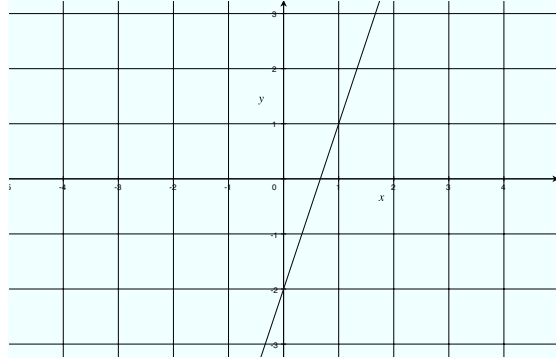
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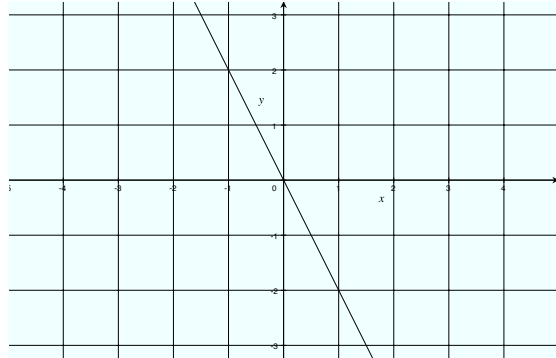
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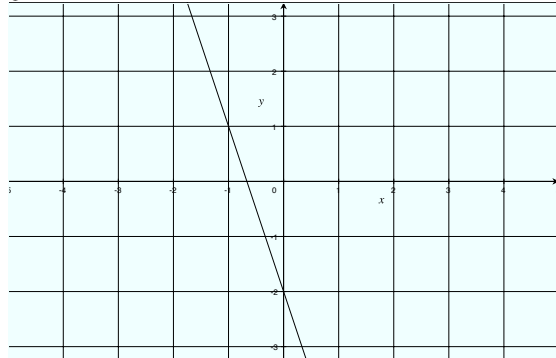
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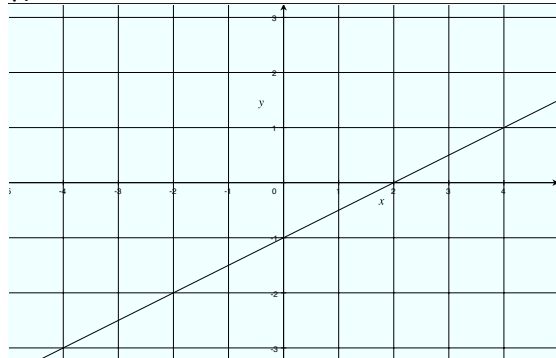
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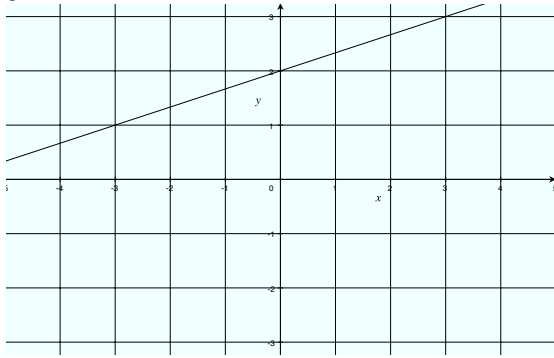
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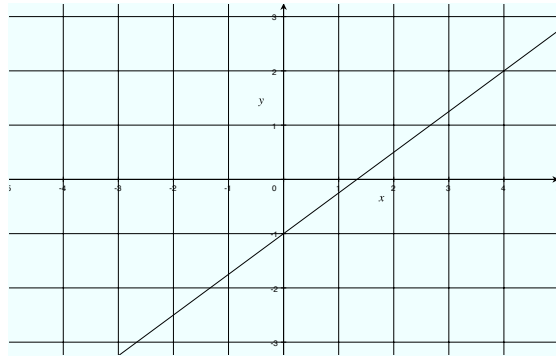
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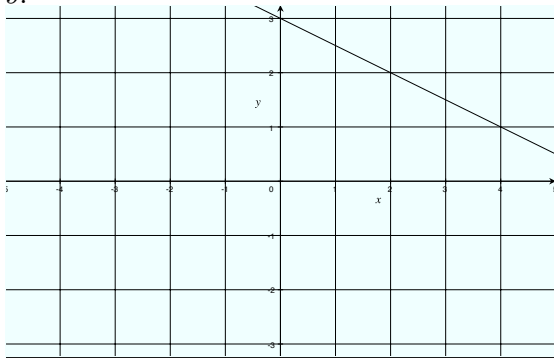
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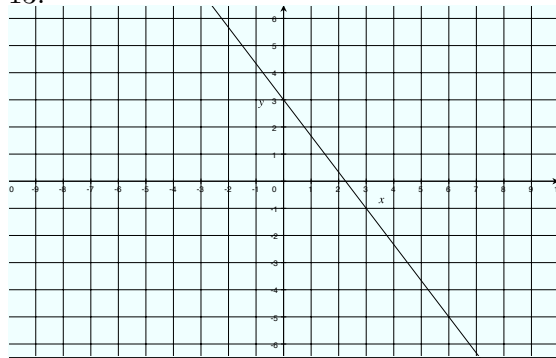
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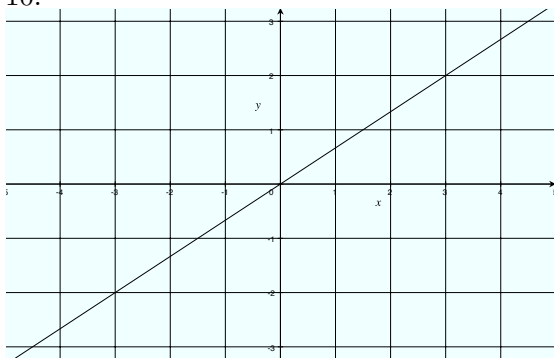
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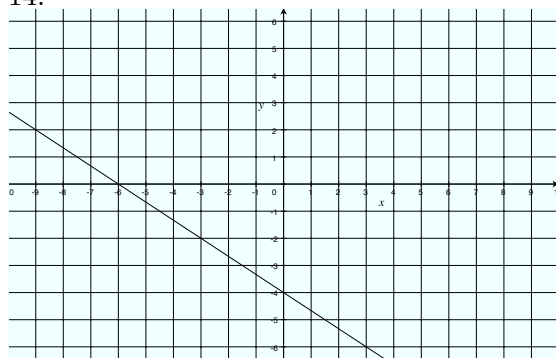
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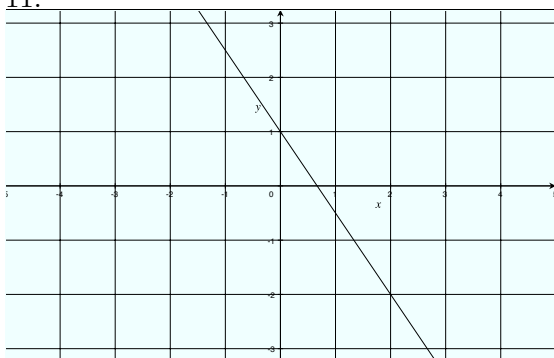
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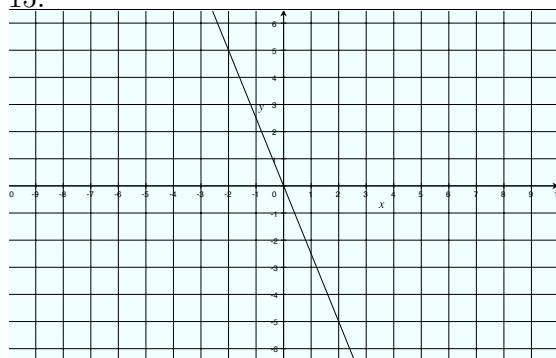
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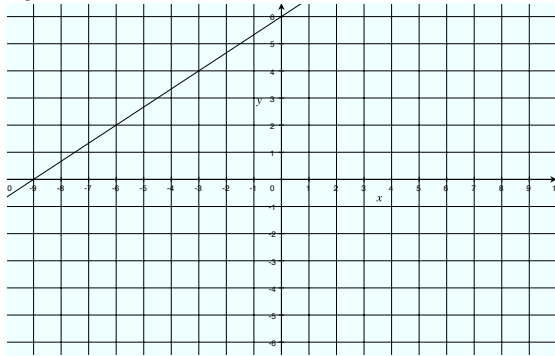
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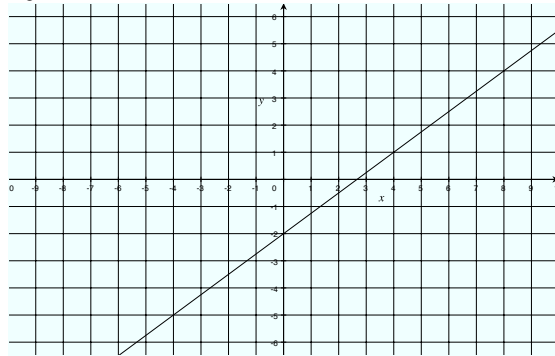
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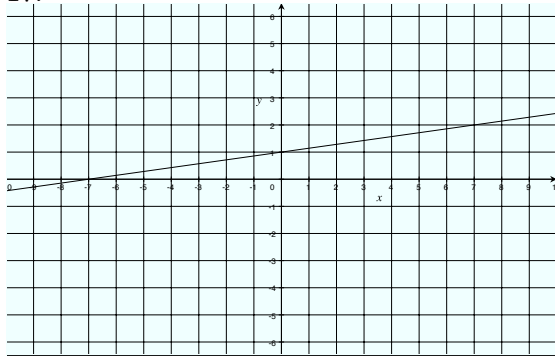
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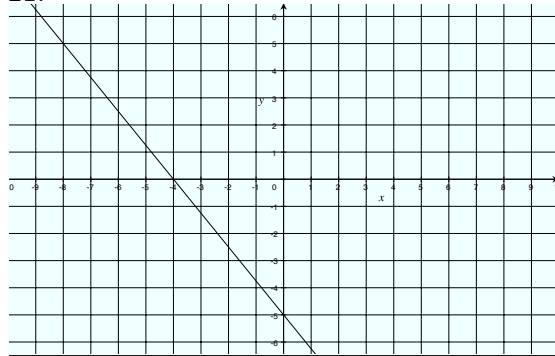
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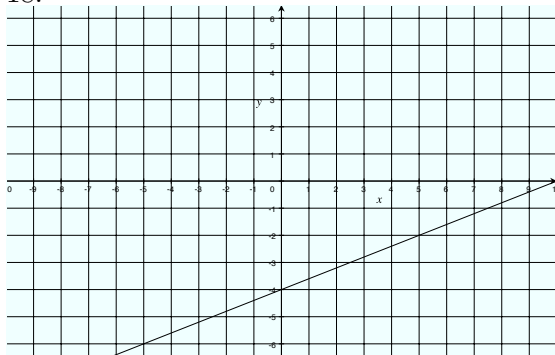
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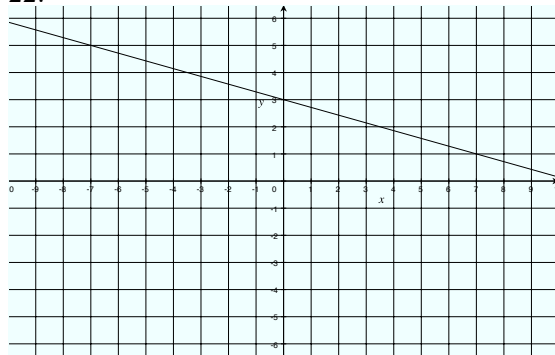
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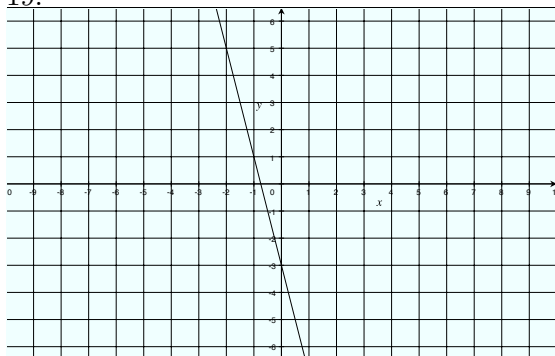
18.



22.



19.



Now draw your own sketch and find, in the form $y = mx + c$, the line that passes through the following points.

23. $(0, -1)$ and $(1, -5)$.

24. $(0, 3)$ and $(2, 4)$.

25. $(0, 4)$ and $(4, 1)$.

26. $(-3, 5)$ and $(0, 2)$.

27. $(0, -5)$ and $(7, 1)$.

28. $(-1, 3)$ and $(1, -1)$.

29. $(1, 3)$ and $(2, 5)$.

30. $(2, 3)$ and $(4, 2)$.

31. $(-2, 6)$ and $(1, -3)$.

Answers

1. $y = x$.
2. $y = -x + 1$.
3. $y = 2x + 2$.
4. $y = 3x - 2$.
5. $y = -2x$.
6. $y = -3x - 2$.
7. $y = \frac{1}{2}x - 1$.
8. $y = \frac{1}{3}x + 2$.
9. $y = -\frac{1}{2}x + 3$.
10. $y = \frac{2}{3}x$.
11. $y = -\frac{3}{2}x + 1$.
12. $y = \frac{3}{4}x - 1$.
13. $y = -\frac{4}{3}x + 3$.
14. $y = -\frac{2}{3}x - 4$.
15. $y = -\frac{5}{2}x$.
16. $y = \frac{2}{3}x + 6$.
17. $y = \frac{1}{7}x + 1$.
18. $y = \frac{2}{5}x - 4$.
19. $y = -4x - 3$.
20. $y = \frac{3}{4}x - 2$.
21. $y = -\frac{5}{4}x - 5$.
22. $y = -\frac{2}{7}x + 3$.
23. $y = -4x - 1$.
24. $y = \frac{1}{2}x + 3$.
25. $y = -\frac{3}{4}x + 4$.
26. $y = -x + 2$.
27. $y = \frac{6}{7}x - 5$.
28. $y = -2x + 1$.
29. $y = 2x + 1$.
30. $y = -\frac{1}{2}x + 4$.
31. $y = -3x$.