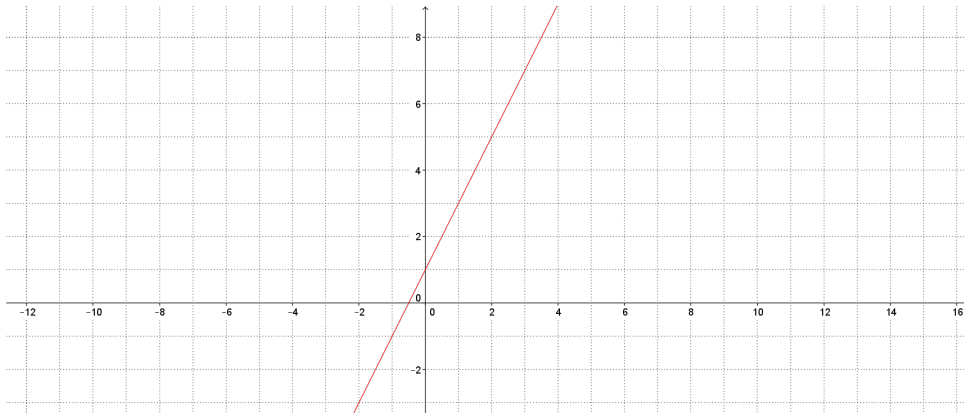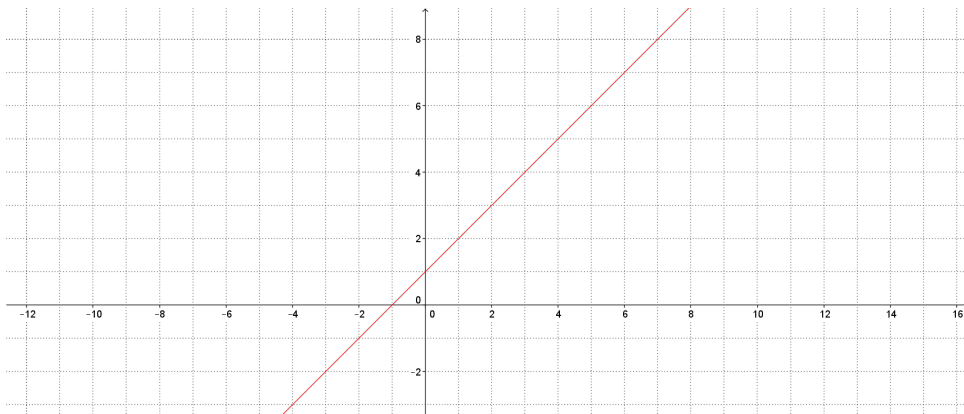Write the equations of the following lines in the form $y = mx + c$
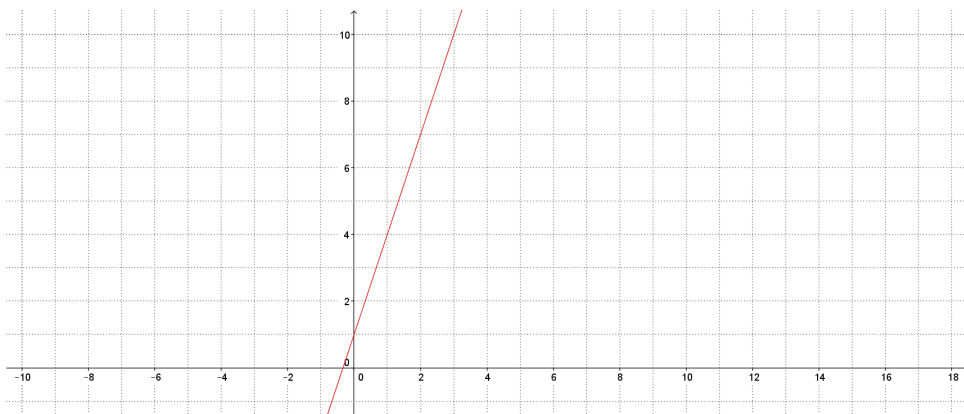
1. .

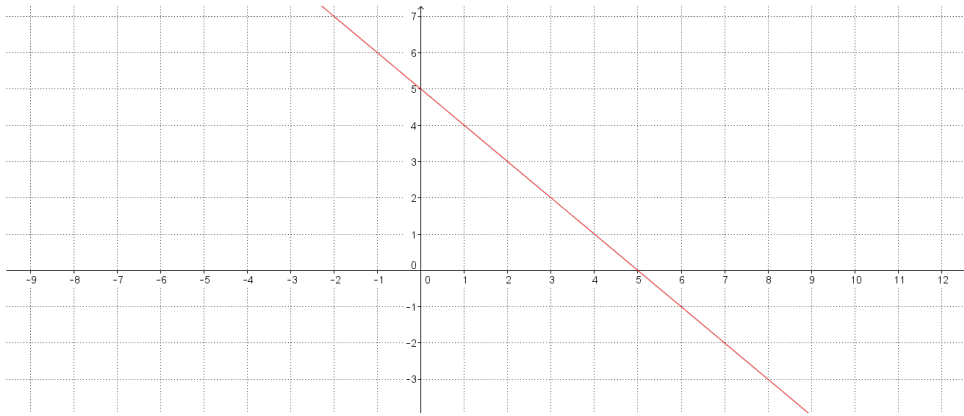2. .

3. .

4. .

5. .

6. .

7. .
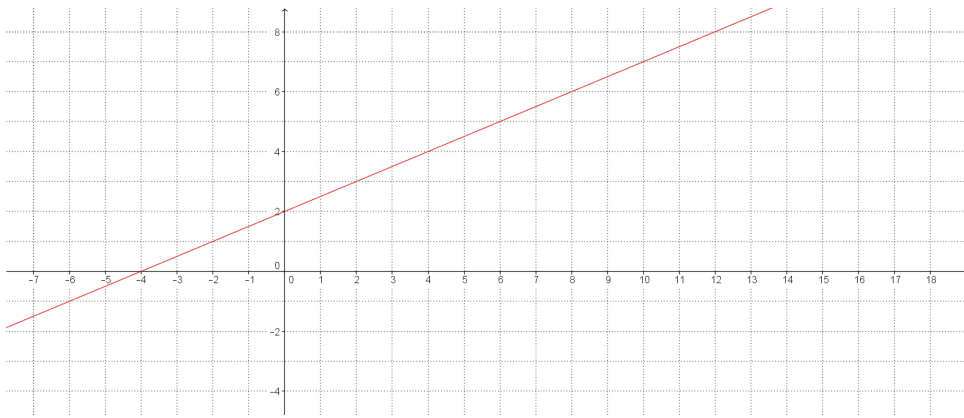
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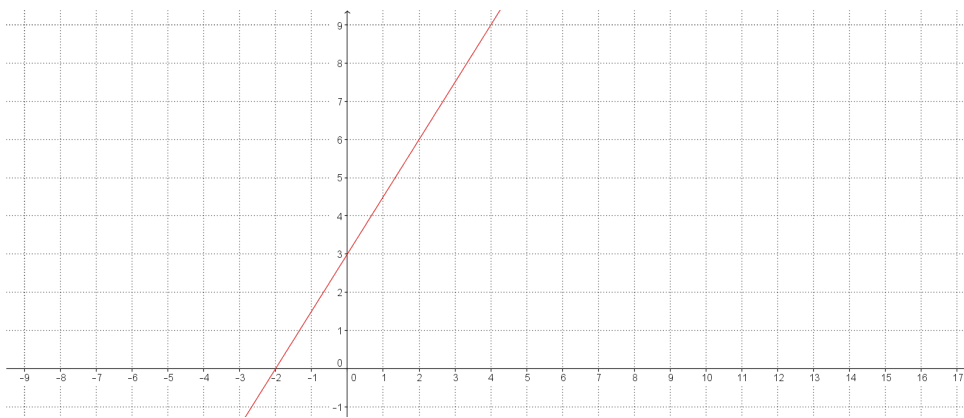
9. .

10. .

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12. .
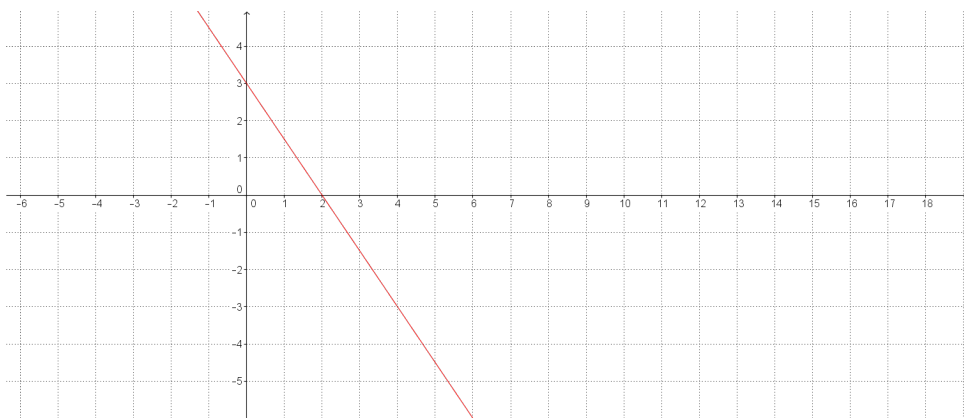
13. .

14. .
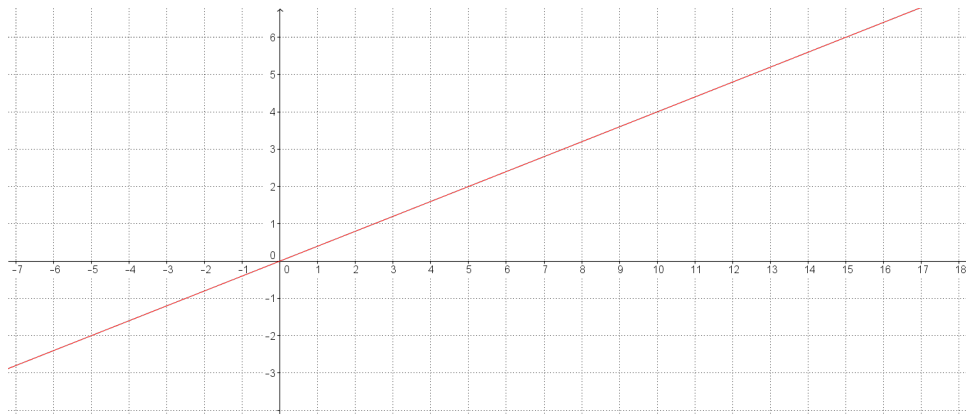
15. Write the equations of the following lines in the form $y = mx + c$. Identify the slope and y-intercept of each line. Then draw a rough sketch of each line.
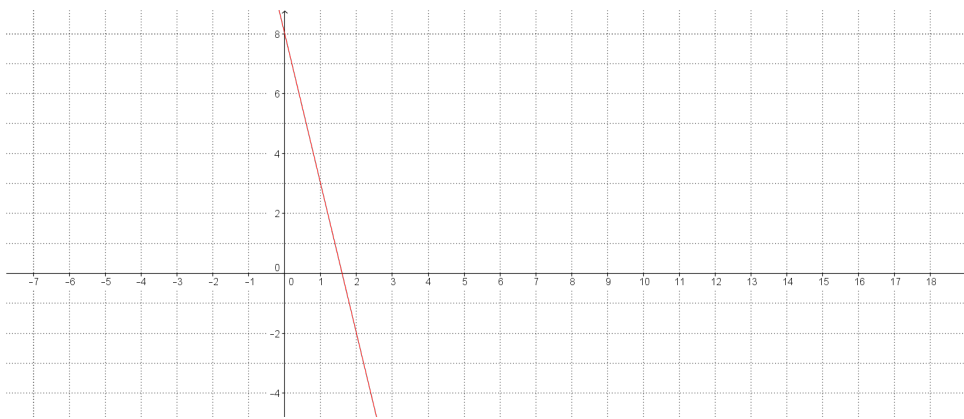
    i. $x + y - 2 = 0$

    ii. $4x + 2y - 6 = 0$

    iii. $3x - y + 9 = 0$

    iv. $6x - 3y + 9 = 0$

    v. $3x + 2y + 8 = 0$

    vi. $5x - 3y - 4 = 0$

    vii. $2x - 3y - 4 = 0$

    viii. $x + 2y - 8 = 0$

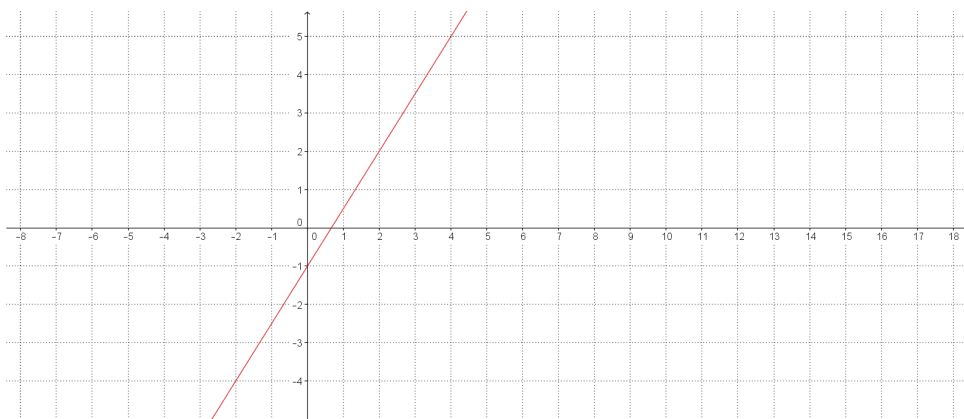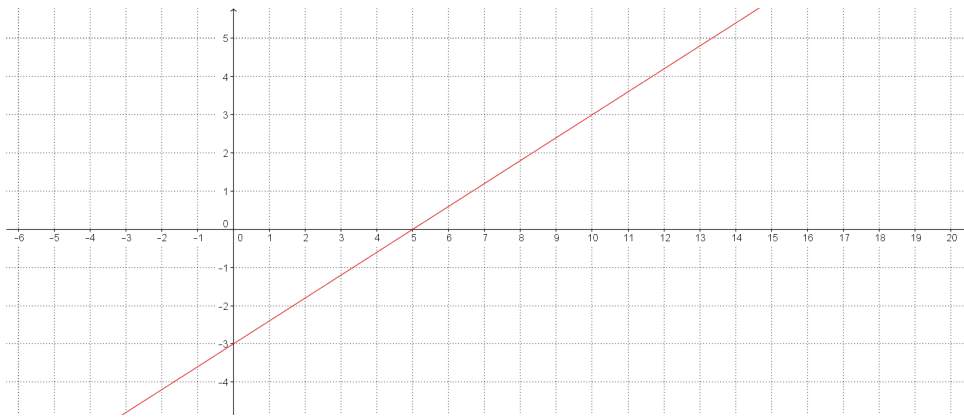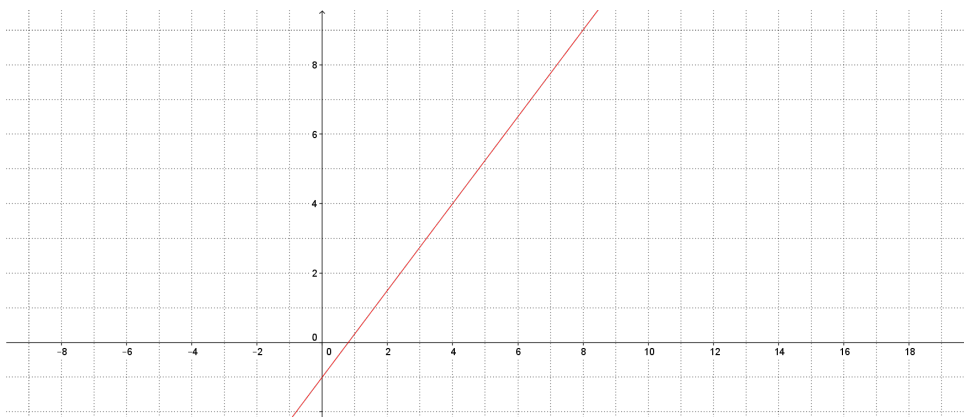   ix. $x - 3y + 7 = 0$

    x. $5x - 2y + 5 = 0$

16. Determine whether the following pairs of lines are parrallel, perpendicular or neither;

    (a) $2x - y + 7 = 0$ and $y = \frac{1}{2}x + 3$

    (b) $y = \frac{3}{2}x - 5$ and $2x + 3y + 5 = 0$

(c) $y = -\frac{1}{2}x - 4$ and $x - 2y - 5 = 0$

(d) $3x - 4y + 2 = 0$ and $y = -\frac{4}{3}x - 8$

(e) $3x + y - 5 = 0$ and $y = -\frac{1}{3}x + 1$

(f) $y = \frac{4}{5}x - 2$ and $4x - 5y + 7 = 0$

17. What is the slope of the line k: $3x - 2y + 7 = 0$? Find the equation of the line containing the point $(2, 2)$, which is parallel to the line k.

18. Find the equation of the line which is parallel to $2x + y - 4 = 0$ and contains the point $(-1, 4)$.

19. What is the slope of the line $3x - 5y + 1 = 0$? Find the equation of the line containing the point $(3, -2)$, which is parallel to the line $3x - 5y + 1 = 0$.

20. Find the equatoin of the line perpendicular to $2x + 3y - 5 = 0$ which contains the point $(-2, -3)$.

21. Find the equation of the line perpendicular to $x + 3y - 3 = 0$ which contains the point $(0, 3)$