

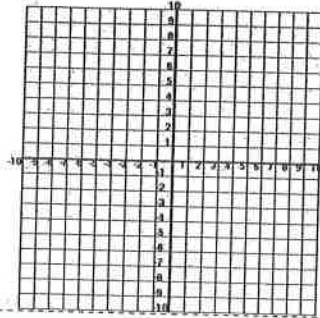
PRACTICE TEST
MATH 10 Linear Equations Review

Name _____

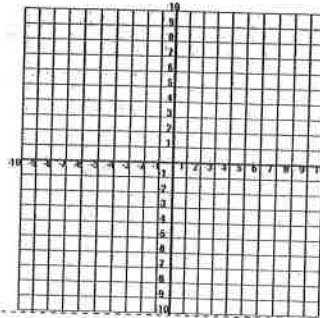
Graphing:

Graph each of the following using whatever method you feel appropriate.

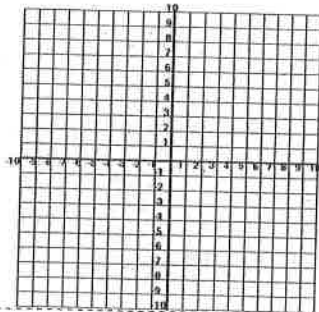
1. $y = -5x$



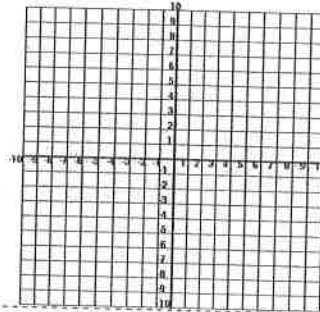
2. $y = -\frac{3}{7}x - 8$



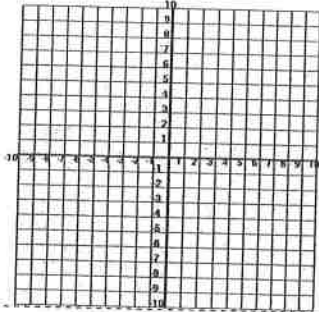
3. $4x - 5y + 20 = 0$



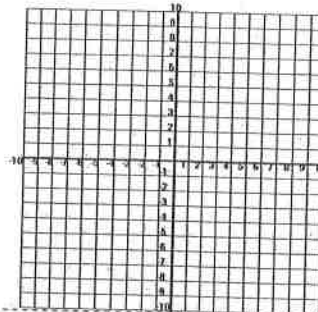
4. $2x + 3y - 6 = 0$



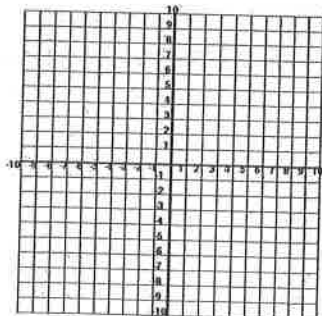
5. $2x - 3 = -\frac{2}{3}y$



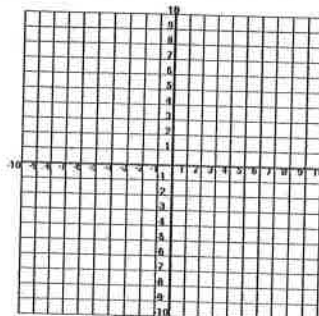
6. $\frac{1}{2}x + \frac{3}{4} = 0$



7. $y = -3$



8. $\frac{1}{2}x - 4 = 0$



Finding Intercepts: (remember...it's OK to have answers that are fraction☺)

9. $2x - 5y + 10 = 0$

x-intercept:

y-intercept:

10. $4x + 7y - 12 = 0$

x-intercept:

y-intercept:

11. $y = \frac{1}{3}x - 5$

x-intercept:

y-intercept:

12. $y + 5 = 0$

x-intercept:

y-intercept:

Writing Equations:

13. Write the equation of the line (in general form) that has a slope of 2 and a y-intercept at -5.

14. Write the equation of the line that passes through (2,5) and has a slope of -5. Answer in slope-intercept form.

15. Write the equation of the line (in general form) that passes through the point (-2,3) and (5,4).

16. Determine the value of y if the slope of a line is -3 and the line passes through (2,-1) and (21,y).

17. Two perpendicular lines intersect on the y-axis. The equation of one line is $3x - 4y + 12 = 0$. Find the equation of the other line in general form.

18. Two perpendicular lines intersect on the x-axis. The equation of one line is $y = \frac{1}{2}x - 4$. Find the equation of the other line in general form.

19. Determine the equation of the line with undefined slope that passes through $(7,9)$. Answer in general form.

20. Determine the equation of the line with an x-intercept of 6 that is perpendicular to the line represented by

$$2x - 4y + \frac{9}{3} = 0$$

Slope-Intercept form.

Extras...

21. Find the x-intercept:

$$\frac{3}{y} - \frac{2}{x} = 0$$

22. Find the value of k that makes

$3x + ky - 14 = 0$ parallel to

$$2x + 5y - 11 = 0.$$

*
Bonus

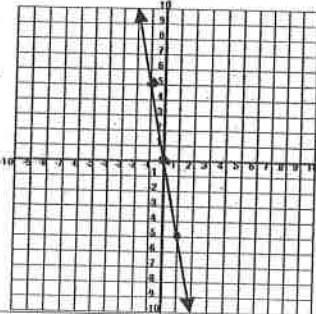
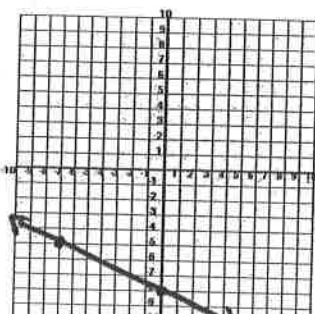
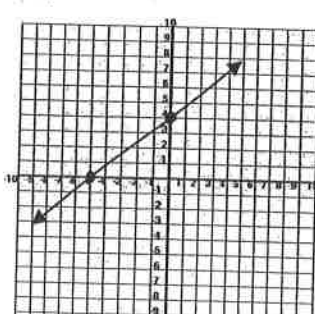
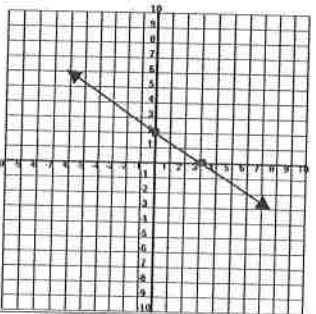
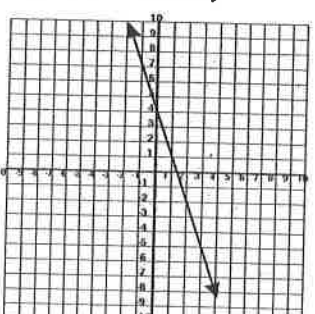
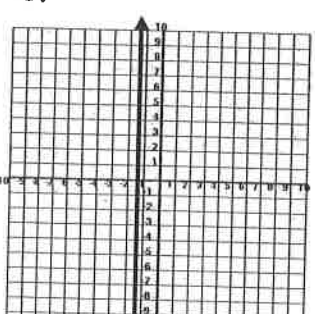
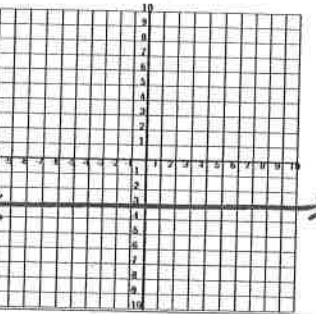
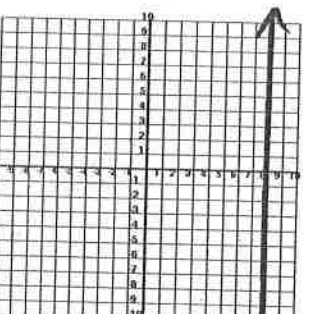
23. Find the coordinates of the point directly between the x-intercept and y-intercept of $3x - y + 21 = 0$.

24. Find the value of k that makes

$3kx + 2y = 12$ perpendicular to

$$4x - 5y - 15 = 0.$$

Answer Key

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4.</p> 	<p>5. (estimate)</p> 	<p>6.</p> 
<p>7.</p> 	<p>8.</p> 	<p>9. $x: -5, \text{ or } (-5, 0)$ $y: 2, \text{ or } (0, 2)$</p>
<p>10. $x: 3, \text{ or } (3, 0)$ $y: \frac{12}{7}, \text{ or } (0, \frac{12}{7})$</p>	<p>11. $x: 15, \text{ or } (15, 0)$ $y: -5, \text{ or } (0, -5)$</p>	<p>12. $x: \text{ does not exist}$ $y: -5, \text{ or } (0, -5)$</p>
<p>13. $2x - y - 5 = 0$</p>	<p>14. $y = -5x + 15$</p>	<p>15. $x - 7y + 23 = 0$</p>
<p>16. -58</p>	<p>17. $4x + 3y - 9 = 0$</p>	<p>18. $2x + y - 16 = 0$</p>
<p>19. $x - 7 = 0$</p>	<p>20. $y = -2x + 12$</p>	<p>21. $(0, 0)$</p>
<p>22. $k = \frac{15}{2}$</p>	<p>23. $(-\frac{7}{2}, \frac{21}{2})$</p>	<p>24. $k = \frac{5}{6}$</p>

