

MTH 135 Review Guide for Test 6

1. Solve for a: $S = 5a + 10b + a$

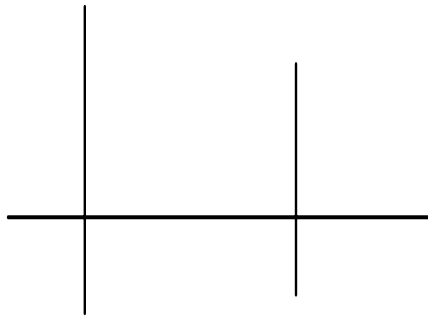
2. Solve for x: $3 - 2[x - 2(x - 1)] = 4 + 3x - 2[7x - (1 - x)]$

3. Graph the following points on the graph below: (3, 0), (2, 4), (-1, 5), (-4, -1)

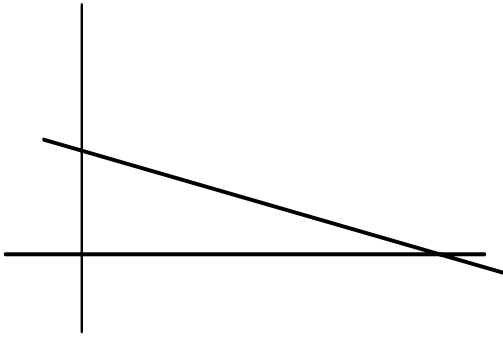
4. Which of the following points lie on the line $5x + 3y = 15$? (Circle all that apply.)
(a.) (2, 3) (b.) (-3, 10) (c.) (-2, 8) (d.) (3, 0) (e.) (1, 3)

5. True or False

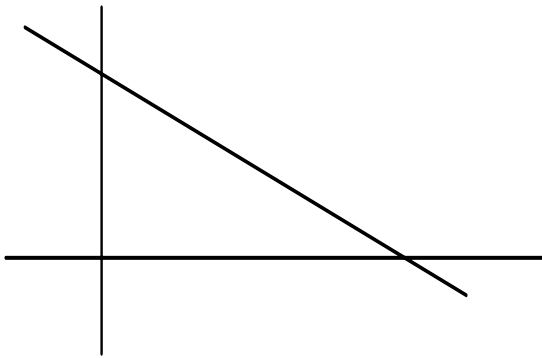
_____ (a.) The graph of the line $y = 2$ is:



_____ (b.) The graph of the line $y = -3x + 2$ is:



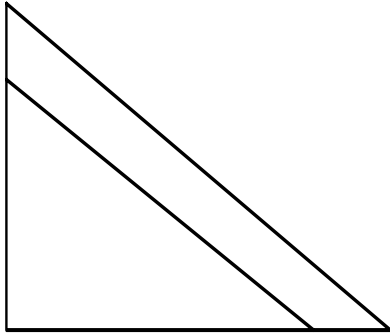
_____ (c.) The slope of the line in the picture is negative.



6. Graph $y = \frac{3}{4}x - 2$.

7. Graph $4x - 3y = 12$.

8. Find the slope of the line that goes through the points (7, -8) and (6, 5).
9. Identify the slope, y-intercept, and x-intercept of the line $4x + 5y = 10$.
10. Find the equation of the line that goes through the points (1, 1) and (-5, -5).
11. Find the equation of the line that goes through the point (4, 8) and is parallel to the line $x - y = 5$.
12. Find the equation of the line that goes through the point (-1, 4) and is perpendicular to the line $y = \frac{2}{3}x$.
13. Find x if the shaded area is 22 square inches in the following isosceles triangle.



14. A bank charges \$0.03 per check and a \$3 per month service charge. How many checks can you write in a month for a total fee of \$3.84?
15. There might also be some kind of mixture or investment problem as we have had before.