

Name: \_\_\_\_\_

**Advanced Math 8 – Midterm Study Assignment**

**Instructions:** For each problem, create three answer choices. (On the actual midterm, there will be four choices, but I am only making you do three here.) One choice should be the correct answer, with all work shown. If there is no work to show, explain why the answer is right. The other two choices should be **INCORRECT** answers. Do not just use random numbers for your incorrect answers. They should lead from common mistakes that you think a student would make on the problem. For each incorrect choice, explain what the error is that leads to this answer. This assignment **WILL** be worth a small grade. Your grade will be based on accuracy of your correct answers, sufficient work shown, and your explanations for your incorrect choices.

1) Convert to a decimal:  $1\frac{3}{8}$

<u>A (correct choice)</u>	<u>B (incorrect choice)</u>	<u>C (incorrect choice)</u>

2) Convert to a fraction:  $0.\overline{45}$

<u>A (correct choice)</u>	<u>B (incorrect choice)</u>	<u>C (incorrect choice)</u>

3) Estimate the value of  $\sqrt{60}$ .

<u>A (correct choice)</u>	<u>B (incorrect choice)</u>	<u>C (incorrect choice)</u>

4) Create a table of values that would NOT represent a function.

<u>A (correct choice)</u>	<u>B (incorrect choice)</u>	<u>C (incorrect choice)</u>

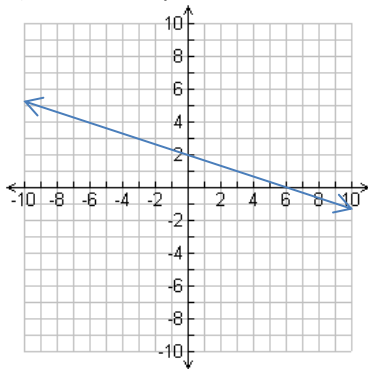
5) If  $a(x) = -4(x - 10)$ , find the value of  $a(-2)$ .

<b><u>A (correct choice)</u></b>	<b><u>B (incorrect choice)</u></b>	<b><u>C (incorrect choice)</u></b>
----------------------------------	------------------------------------	------------------------------------

6) Find the slope between the points  $(-3, 10)$  and  $(9, 6)$ .

<b><u>A (correct choice)</u></b>	<b><u>B (incorrect choice)</u></b>	<b><u>C (incorrect choice)</u></b>
----------------------------------	------------------------------------	------------------------------------

7) Find the equation of the line:



<b><u>A (correct choice)</u></b>	<b><u>B (incorrect choice)</u></b>	<b><u>C (incorrect choice)</u></b>
----------------------------------	------------------------------------	------------------------------------

8) Graph the line:  $y = \frac{1}{4}x - 6$

<b><u>A (correct choice)</u></b> 	<b><u>B (incorrect choice)</u></b> 	<b><u>C (incorrect choice)</u></b> 
--------------------------------------	----------------------------------------	----------------------------------------

9) Solve the equation:  $3(-4x + 8) + 8x = 16$

<u><b>A (correct choice)</b></u>	<u><b>B (incorrect choice)</b></u>	<u><b>C (incorrect choice)</b></u>

10) Solve the equation:  $24 = \frac{3}{4}x - 6$

<u><b>A (correct choice)</b></u>	<u><b>B (incorrect choice)</b></u>	<u><b>C (incorrect choice)</b></u>

11) Solve the system of equations:  $\begin{cases} x = -2y \\ -3x - 2y = 20 \end{cases}$

<u><b>A (correct choice)</b></u>	<u><b>B (incorrect choice)</b></u>	<u><b>C (incorrect choice)</b></u>

12) Solve the system of equations:  $\begin{cases} 6x + 3y = 24 \\ 3x - 2y = 5 \end{cases}$

<u><b>A (correct choice)</b></u>	<u><b>B (incorrect choice)</b></u>	<u><b>C (incorrect choice)</b></u>