

AMI DAY 5 Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Directions:** Do Each problem and show all work.

1. Which of the following is equivalent to  $-8(x - 2) < 3x - 6$ ?
  - a.  $X < 2$
  - b.  $X > 2$
  - c.  $X \geq -2$
  - d.  $X < -2$
  - e.  $X > -2$
  
2. How many different positive integers are factors of both 28 and 42?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
  - e. More than 4
  
3. What is the slope of a line that includes the points  $(-4, 1)$  and  $(10, -6)$ ?
  - a. 2
  - b.  $\frac{1}{2}$
  - c.  $-\frac{1}{2}$
  - d.  $\frac{6}{7}$
  - e.  $-\frac{7}{6}$
  
4. What is the value of  $x$  if  $x^2 - 5x - 14 = 0$  and  $x > 0$ ?
  - a. 2
  - b. 4
  - c. 5
  - d. 7
  - e. 9
  
5. If the height of an equilateral triangle is 9, what is the area?
  - a. 27
  - b. 54
  - c. 81
  - d.  $27\sqrt{5}$
  - e.  $54\sqrt{5}$