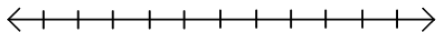
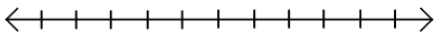
T3-16 Number _____ Name _____ Period _____

Solve the following inequalities and graph the solution on a number line.

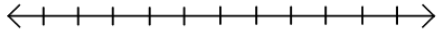
1) $3(x-2) > -12$



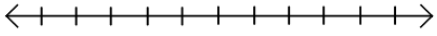
2) $-2(x-5) < -5$



3) $4(3+x) \geq -9$



4) $-\frac{1}{2}(2x+6) \leq -6$



5) Given the following inequalities, which one would you flip the symbol when solving? Explain how you know.

a. $4x - 8 > 2$

b. $6 - 2x < -3$

6) Which fraction is the smallest? Show how you know.

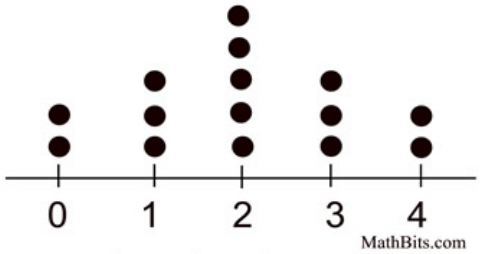
$$\frac{3}{5} \quad \frac{10}{17} \quad \frac{15}{22} \quad \frac{30}{54} \quad \frac{60}{121}$$

Add the following fractions.

7) $-\frac{2}{5} + \frac{1}{7}$

8) $-\frac{4}{5} + \frac{5}{6}$

9) The dot plot below represents the number of siblings a student in Mr. Brown's class has in their family. Find the mean absolute deviation of the dot plot below.



Numbers of Brothers and Sisters

10) If the mean number of siblings a student has in Mr. Green's class is 3 and their MAD is 0.5, which class has more variation? Explain how you know.