Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. (a) Write in interval notation and graph "the set of real numbers greater than or equal to -3 and less than 6";

(b) Write $(-\infty, 3) \cup [1, 6)$ as a single interval;

2. Evaluate the following expressions:

(a)
$$\frac{1}{3} - \left(-\frac{1}{12}\right) =$$

(b)
$$|12-4|-|3-4\cdot 5|=$$