

Algebra III Inequalities

8/24/17

1. Sketch each interval.

a. $[4,8)$



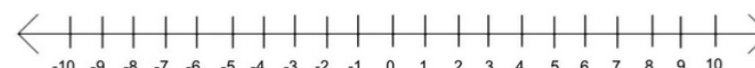
b. $(0,3)$



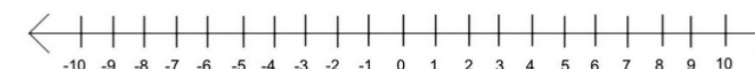
c. $[-2,3) \cup (4,6]$



d. $[2, \infty)$



e. $(-\infty, 5]$



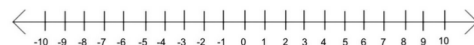
2. Solve each representing your answer in interval notation.



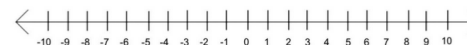
a. $14 + 2m \leq 3m$



b. $-4k \leq 32$



c. $\frac{1}{4}(m+3) + 2 \geq \frac{3}{4}(m+8)$



d. $5 < 3x - 4 \leq 9$

3. Solve

- a. A rental company charges \$5 to rent a carpet cleaner, plus \$4.25 per hour. Margie can spend no more than \$39 to clean the carpets in her home. What is the maximum amount of time she can use the cleaner?

- b. Michael has scores of 92, 90, and 84 on his first three tests. What score must he earn on his fourth test to keep an average of at least 90?

