Name: $\qquad$

## 6.5: Solving Linear Inequalities by Using Multiplication and Division Worksheet

1. Do not solve each inequality. Determine which of the given numbers are solutions of the inequality.
a) $3 t<-5$
b) $5-3 d \geq 2-d$ $-5,0,5$
2. Solve each inequality and graph the solution.
a) $-3.5 a<-1.3 a+6.6$

b) $-\frac{5 f}{6}-\frac{2}{3}>\frac{4}{3}$
c) $1.3-2.5 x \leq-1.1 x-0.52$

d) $-3(n-2.5) \leq 4(3.5-n)$

3. Nadia gets paid $\$ 1000$ per month plus $5 \%$ commission on her sales. She wants to earn at least $\$ 2200$ this month. Write an inequality to represent this situation, then solve it to determine how much Nadia must sell to reach her goal.
