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. Solve the following inequality for $x$. Write the solution set in interval notation and graph it on the real line: $\frac{x-3}{2}>\frac{1}{2}-\frac{x-7}{4}$.
2. Suppose that George ${ }^{\circledR}$ mixes 10 lbs of dried apricots that sell for $\$ 5.40$ per pound with some dried cherries that sell for $\$ 8.00$ per pound. If he intends to have a mix that is worth $\$ 6.50$ per pound, can you help him decide how many pounds of cherries he should use?
