Name: $\qquad$ Date: $\qquad$

| Learning Goal 9.1 | Solving linear inequalities. |
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1. Graph $4 x+2 y \leq 12$ and determine whether $(1,3)$ is part of the solution.
2. Graph $5 x-20 y>0$.


3. Write and inequality to represent the graph.

4. Find all possible combinations of tile and stone that can be used to make a mosaic. Tile costs $\$ 2.50 / \mathrm{ft}^{2}$, stone costs $\$ 6 / \mathrm{kg}$ and the budget for the mosaic is $\$ 150$.

