

Name _____

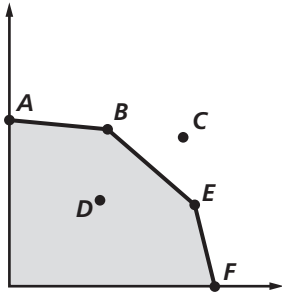
5-9A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 367–371 for objectives.

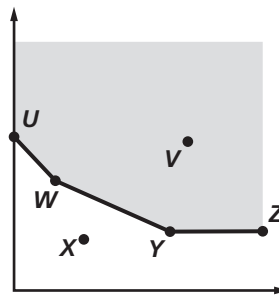
PROPERTIES Objective E

In 1 and 2, tell which labeled points could be the solution to a linear-programming problem.

1. _____



2. _____



3. Name a labeled point in Question 1 that cannot be a solution to a linear-programming problem and explain why.

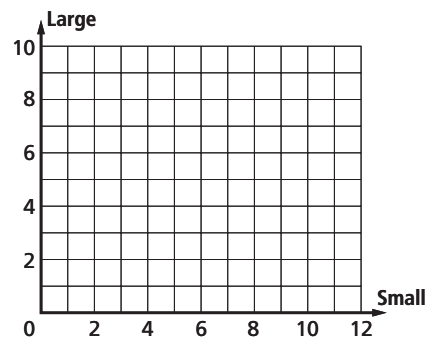
USES Objective G

In 4–8, Chris is a stained glass artist. He makes both small circular pieces and larger rectangular windows. A small piece costs him \$40 for materials and takes four hours to make. A larger window costs \$60 for materials and takes twelve hours to make. In one week, he plans to work 48 hours and he has \$360 to spend on materials.

4. Write a system of inequalities describing the constraints.

5. At the right, graph the feasible region.

6. Find the coordinates of each vertex of the feasible region.



7. Chris makes a profit of \$120 for a smaller piece and \$340 for a larger window. Find his profit at each of the vertices of the feasible region.

8. How many of each size should Chris make to maximize his profit?
