Name

12-8A Lesson Master

Questions on SPUR Objectives

See Student Edition pages 862-865 for objectives.

SKILLS) Objective D

1. Solve by hand for all real solutions: $\begin{cases} y = 2x - 1 \\ y = x^2 - 4 \end{cases}$

In 2 and 3, a. estimate solutions to the system by graphing on a graphing utility, and b. find the exact solutions.

2.
$$\begin{cases} xy = -12 \\ y = -\frac{5}{2}x + 3 \end{cases}$$

3.
$$\begin{cases} y = 3x - 8 \\ 4x^2 + y^2 = 64 \end{cases}$$

a. _____

ı. _____

b. _____

b. _____

USES) Objective H

4. A day-care center is fencing off a rectangular area for a playground. They can afford 280 feet of fencing. State licensing requires that the playground be at least 4800 square feet.

a. Let *x* be the width of the playground and *y* be the length. Write an equation stating that the perimeter is 280 feet.

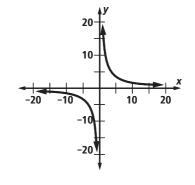
b. Write an equation stating that the area is 4800 ft².

c. Use your answers to Parts a and b to find the dimensions.

REPRESENTATIONS Objective K

5. Find two real numbers whose sum is 11 and whose product is 20 or explain why it is impossible.

6. On the graph at the right, draw three lines that intersect the hyperbola xy = 16 in zero, one, and two points respectively.



7. Give equations for your lines.