

Name _____

3-7A Lesson Master

Questions on SPUR Objectives

See pages 178–179 for objectives.

SKILLS Objective B

In 1–6, solve the inequality and check your answer. Show your work.

1. $3w + 5 \leq 14$

2. $\frac{2}{3}(1 - a) \geq 4$

3. $10 < 1.7b + 3.5$

4. $\frac{-1}{2}(4z - 30) + 2(6z - 50) \leq 68$

5. $\frac{2}{3}k + \frac{3}{2} < \frac{1}{6}$

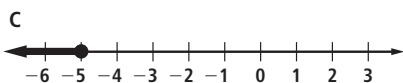
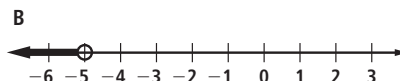
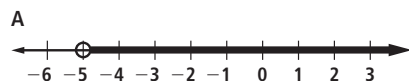
6. $3 > 5r - 7(r + 1)$

USES Objective D

7. The velocity, in feet per second, of an object fired directly upward is given by $v = 120 - 32t$, where t is the number of seconds. When will the velocity be less than 32 feet per second? _____
8. You have \$40,000 to invest and want to earn at least \$2,400 in interest. A bank will pay you 5% simple interest. Your brother needs money for his business and will pay you 9% interest. You want to reduce your risk by lending as little to your brother as possible. If you lend your brother x dollars, then you will have $\$40,000 - x$ to invest in the bank.
- a. Write an inequality to describe the investments you need to make to earn at least \$2,400 in interest. _____
- b. How little can you lend to your brother and still make your investment goal? _____

REPRESENTATIONS Objective F

9. *Multiple Choice.* Which of the graphs below shows the solutions of $-4 - 2n \geq 6$? _____



10. Graph all solutions to the inequality in Question 4 above.

