

Name _____

4-5A Lesson Master**Questions on SPUR Objectives**

See pages 245–249 for objectives.

SKILLS Objective B

In 1 and 2, solve and check.

1. $2y - 18 < -y - 12$

2. $4(s - 4.5) + 8 \leq 6s$

In 3 and 4, solve and graph on a number line.

3. $\frac{1}{6}(n - 9) + 2 < -5n$

4. $0.52t - 1.42 \geq -2.31t$

**PROPERTIES** Objective F

5. Fill in what was done to solve the inequality.

$14x - 6 \leq 6x + 14$

$8x - 6 \leq 14$

$8x \leq 20$

$x \leq \frac{20}{8}$

$x \leq \frac{5}{2}$

6. Consider the inequality $700y + 200 \geq 1100 - 100y$.a. Solve it by first adding $100y$ to each side. _____b. Solve it by first adding $-700y$ to each side. _____**USES** Objective H

7. A manufacturing company is investing in new machinery. They must choose between two similar machines. Machine *A* costs \$120,000 and does \$2,550 worth of work per day. Machine *B* costs \$105,500 and does \$2,360 worth of work per day. How many days of work are required for machine *A* to be the cheaper option? _____

8. Joe Nodough made some unwise investments and is \$92,000 in debt, but he works hard and is able to repay \$7,000 per year. His brother, Igor, has \$2,000 but is relatively less frugal and saves only \$800 per year. Assuming no interest on Joe's debt, for how long will Joe have less money than Igor? _____