Name

Period

HW 2-3
Writing Linear Inequalities

Sec1

Unit 2

- 1. Paige joins an online book club that costs \$20 and then \$5 per book she reads.
 - a. Fill in the blank to show she wants to spend at most \$50.

$$20 + 5x _{---} 50$$

b. Solve the inequality.

- 2. Brandon buys a house with 20 feet of fencing around the yard. He is going to increase the fence by adding 4 feet per day.
 - a. Fill in the blank to show he wants no more than 40 feet of fencing.

$$4x + 20$$
 40

b. Solve the inequality.

- 3. Laura is given \$400 for her birthday and starts spending \$30 each week.
 - a. Fill in the blank to show she wants to have less than \$130.

$$400 - 30x _{--} 130$$

b. Solve the inequality.

Name

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- 1. Paige joins an online book club that costs \$20 and then \$5 per book she reads.
 - a. Fill in the blank to show she wants to spend at most \$50.

$$20 + 5x _{---} 50$$

b. Solve the inequality.

- 2. Brandon buys a house with 20 feet of fencing around the yard. He is going to increase the fence by adding 4 feet per day.
 - a. Fill in the blank to show he wants no more than 40 feet of fencing.

$$4x + 20_{---}40$$

b. Solve the inequality.

- 3. Laura is given \$400 for her birthday and starts spending \$30 each week.
 - a. Fill in the blank to show she wants to have less than \$130.

$$400 - 30x _{--} 130$$

b. Solve the inequality.

- 4. Lauren is ordering cheese pizza and supreme pizza for a large party. The cheese pizzas cost \$10 each and the supreme are \$14 each.
 - a. Fill in the blank to show she only has \$150 to spend.

$$10x + 14y ____150$$

- 5. Mrs. Tanuvasa is buying school supplies for her students. She needs notebooks and pencils. The notebooks cost \$1 each and a pack of pencils cost \$5 each.
 - b. Fill in the blank to show she wants to use a coupon that says you must spend more than \$100.

$$x + 5y _{--}100$$

- 6. Mike has scored 45 points so far in this basketball season. He plans to score an average of 12 points per game from now on.
 - c. Fill in the blank to show he wants to score at least 117 points.

$$12x + 45 _{---} 117$$

d. Solve the inequality.

Answers			
$\boxed{12x + 45 \ge 117}$	$x \le 5$	$5x + 20 \le 50$	
$x \ge 6$	-30x + 400 < 130	$x \leq 6$	
x + 5y > 100	x>9	$ 4x+20 \le 50 $	

- 4. Lauren is ordering cheese pizza and supreme pizza for a large party. The cheese pizzas cost \$10 each and the supreme are \$14 each.
 - e. Fill in the blank to show she only has \$150 to spend.

$$10x + 14y ____150$$

- 5. Mrs. Tanuvasa is buying school supplies for her students. She needs notebooks and pencils. The notebooks cost \$1 each and a pack of pencils cost \$5 each.
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$$x + 5y _{--}100$$

- 6. Mike has scored 45 points so far in this basketball season. He plans to score an average of 12 points per game from now on.
 - g. Fill in the blank to show he wants to score at least 117 points.

$$12x + 45 _{---} 117$$

h. Solve the inequality.

Answers			
$\boxed{12x + 45 \ge 117}$	$x \le 5$	$5x + 20 \le 50$	
	20		
$\begin{array}{c} x \ge 6 \\ x + 5y > 100 \end{array}$	-30x + 400 < 130 x > 9	$\begin{array}{c c} x \le 6 \\ 4x + 20 \le 50 \end{array}$	