

Word Problem Practice

- a. Keith has \$500 in a savings account at the beginning of the summer. He wants to have at least \$200 in the account by the end of summer. He withdraws \$25 each week for food clothes, and movie tickets. Write an inequality that represents Keith's situation. How many weeks can Keith withdraw money from his account?
- b. Yellow Cab Taxi charges \$1.75 flat rate in addition to \$0.65 per mile. Katie has \$10 to spend on a ride. Write an inequality that represents Katie's situation. How many miles can Katie travel?
- c. Tamara has a cell phone plan that charges \$0.07 per minute plus a monthly fee of \$19.00. She budgets \$29.50 per month for total cell phone expenses without taxes. Write an inequality that represents Tamara's situation. What is the maximum number of minutes Tamara could use her phone each month?
- d. The ninth grade class at a local high school needs to purchase a park permit for \$250 for their upcoming class picnic. Each ninth grader attending the picnic pays \$0.75. Each guest pays \$1.25. If 200 ninth graders attend the picnic, write an inequality to determine the number of guests needed to cover the cost of the permit.
- e. Natasha wants to treat her friends to the movies. The movie tickets cost \$11 each and she also wants to spend \$21 on popcorn and candy for her friends to share. She only brought \$131 with her. Write and solve an inequality to represent how many people she can treat to the movies.
- f. A company wants to order company polo shirts at a discount. The cost will include \$24 per shirt and a \$50 delivery fee. Write and solve an inequality that represents how many shirts the company must buy if they must spend a minimum of \$200 in order to receive the discount.
- g. A baseball team has \$1,000 to spend on supplies. The team spent \$185 on a new bat. New baseballs cost \$4 each. Write and solve an inequality to determine the number of baseballs the team can purchase.
- h. You are participating in a charity walk. You want to raise at least \$500 for the charity. You already have \$175 by asking people to pledge \$25 each. Write and solve an inequality to determine how many more \$25 pledges you need.
- i. A carpet cleaner charges \$59 for the first room and \$30 for each additional room. A customer does not want to spend more than \$125 for having the carpets in his house cleaned. Write and solve an inequality to determine how many carpets the customer can have cleaned. Based on your answer, how many rooms can the customer ACTUALLY have cleaned?

Word Problem Answers:

a. $500 - 25w \geq 200$

$$w \leq 12$$

Keith can withdraw money from his account for no more than 12 weeks.

b. $0.65m + 1.75 \leq 10$

$$m \leq 12.69$$

Katie can travel no more than 12 miles (taxi charge by the mile) on his budget.

c. $0.07m + 19 \leq 29.50$

$$m \leq 150$$

Tamara can use no more than 150 minutes a month on her budget.

d. $0.75(200) + 1.25g \geq 250$

$$g \geq 80$$

The ninth grade needs at least 80 guests to attend to reach their goal.

e. $11f + 21 \leq 131$

$$f \leq 10$$

Natasha can treat no more than 10 friends at the movies with her budget.

f. $24s + 50 \geq 200$

$$s \geq 6.25$$

The company needs to purchase at least 7 shirts to earn the discount.

g. $185 + 4b \leq 1000$

$$b \leq 203.75$$

The baseball team can purchase no more than 203 baseballs on their budget.

h. $175 + 25p \geq 500$

$$p \geq 13$$

I need at least 13 more pledges to make my goal.

i. $59 + 30r \leq 125$

$$r \leq 2.2$$

The customer can have no more than 2 rooms cleaned on his budget (a company won't clean two tenths of a room)