

## Writing an Inequality

Name: \_\_\_\_\_

1. Five students transferred out of a class with  $n$  students in it. The class size is now below 28 students. Which inequality can the school principal use to find the number of students,  $n$ , who were originally in the class?

a.  $28 - 5 < n$       b.  $28 < n - 5$       c.  $n - 5 < 28$       d.  $5 - n < 28$

2. Kyra has 1 dime and an amount of nickels,  $n$ . If the total value of the change is at least \$0.45, which inequality can Napoleon use to find the number of nickels that he has?

a.  $0.15n \geq 0.45$       b.  $0.05n + 0.1 \leq 0.45$       c.  $0.05n + 0.1 \geq 0.45$       d.  $0.15 \leq 0.45$

3. Write and solve the following inequalities

a. Ms. Drayton's volleyball team charges \$4.50 per car at their car wash. How many cars do they have to wash to earn at least \$300?

b. An elevator can safely hold no more than 2000 pounds. A worker must use the elevator to take 55-lb boxes to a storage area. If the worker weighs 165 pounds, how many boxes can he safely move at one time?

c. Meijer sells T-shirts for \$12. How many shirts must be sold to make at least \$400

d. Niccos wants to buy his girlfriend as many roses as he can. He has \$40.00 to spend. How many roses can he buy if each rose cost \$2.50