

Exercise – Inequality

1. Emma got a new job and will have to move. Her monthly income will be \$5,625. To qualify to rent an apartment, Emma's monthly income must be at least three times as much as the rent. What is the highest rent Emma will qualify for?
2. Alan is loading a pallet with boxes that each weighs 45 pounds. The pallet can safely support no more than 900 pounds. How many boxes can he safely load onto the pallet?
3. The elevator in Yehire's apartment building has a sign that says the maximum weight is 2,100 pounds. If the average weight of one person is 150 pounds, how many people can safely ride the elevator?
4. Dawn won a mini-grant of \$4,000 to buy tablet computers for her classroom. The tablets she would like to buy cost \$254.12 each, including tax and delivery. What is the maximum number of tablets Dawn can buy?
5. Angie has \$20 to spend on juice boxes for her son's preschool picnic. Each pack of juice boxes costs \$2.63. What is the maximum number of packs she can buy?
6. Daniel wants to surprise his girlfriend with a birthday party at her favorite restaurant. It will cost \$42.75 per person for dinner, including tip and tax. His budget for the party is \$500. What is the maximum number of people Daniel can have at the party?
7. Pete works at a computer store. His weekly pay will be either a fixed amount, \$925, or \$500 plus 12% of his total sales. How much should his total sales be for his variable pay option to exceed the fixed amount of \$925?
8. Rameen's heating bill is \$5.42 per month plus \$1.08 per therm. How many therms can Rameen use if he wants his heating bill to be a maximum of \$87.50?