

Why Should You Never Say 288 To Anyone?

For each problem, write an equation or inequality that could be used to determine a solution. Find the equation or inequality in the box, and record its letter in the space next to the problem. When all the problems have been matched with an equation or inequality, use the letters to fill in the corresponding blanks and reveal the answer to the title question.

$\frac{5}{2}$
 $\frac{2}{4}$
 $\frac{2}{1}$
 $\frac{1}{1}$
 $\frac{3}{6}$
 $\frac{1}{4}$
 $\frac{4}{4}$

1. _____ Betsy considers changing her music download service. Her current service offers downloads at \$0.99 each with a monthly fee of \$4.95. Betsy receives an offer from another service that offers a monthly fee of \$6.75 with downloads at \$0.74 each. How many songs, n , will Betsy need to download for the new service to cost less than her current service?

Equation/Inequality: _____

2. _____ Two containers have leaks. Container X begins with 80 ounces and leaks at a rate of 0.6 ounce per minute. Container Y begins with 100 ounces and leaks at a rate of 1 ounce per minute. How many minutes, n , before the containers have the same number of ounces?

Equation/Inequality: _____

3. _____ Two candles are lit at exactly 8 P.M. The 12-inch candle burns 0.5 inch each hour. The 18-inch candle burns 1.5 inches every hour. How many hours, n , will the candles burn before the 18-inch candle is shorter than the 12-inch candle?

Equation/Inequality: _____

4. _____ A video game club charges a rental fee of \$5 per game for nonmembers. For a \$25 annual fee, members rent games for \$3 per game. How many games, n , does a member need to rent in a year to make the cost of the membership fee worth paying?

Equation/Inequality: _____

5. _____ At Rock-n-Bowl, shoe rental costs \$2, and each game costs \$3.50. At Strikez, each game costs \$3, and shoe rental costs \$4.50. If the same amount of money is spent at both locations, how many games, n , are bowled?

Equation/Inequality: _____

6. _____ Darla makes pies for a fundraiser. Each pie costs \$3 to make, and she spends \$20 on equipment. Darla plans to sell the pies for \$5 each. How many pies, n , must Darla sell before she at least begins making a profit?

Equation/Inequality: _____

T: $80 - 0.6n = 100 - n$	S: $5n > 25 + 3n$
R: $3n + 20 < 5n$	I: $3.5n + 2 = 3n + 4.5$
O: $0.99n + 4.95 > 0.74n + 6.75$	G: $12 - 0.5n > 18 - 1.5n$
M: $5n < 3n - 20$	L: $0.99n + 4.95 \leq 0.74n + 6.75$