

Math 29
Homework 0

The first problem on this homework and every subsequent homework is to write a 1-3 sentence summary of what we did in class the previous period.

1. Use scientific notation to estimate the following numbers.

a) $((37^{37})^{37})^{37}$

b) $((.07^{-25})^{25})^{25}$

2. The following equations relate the temperature scales for Celsius with that of Fahrenheit and Kelvin: $F = (9/5)C + 32$ and $K = 273 + C$.

a) Is there a temperature whose degrees measured in Fahrenheit is equal to its degrees measured in Celsius? Explain.

b) Is there a temperature whose degrees measured in Celsius is equal to its degrees measured in Kelvin? Explain.

c) Find an equation for Kelvin as a function of Fahrenheit.

d) Is there a temperature whose degrees measured in Fahrenheit is equal to its degrees measured in Kelvin? Explain.

3. Suppose you are trying to decide whether you should buy car A or car B. Car A costs \$9500 and gets 25 mpg, while car B costs \$12,000 and gets 33 mpg. Suppose that each weekday you drive 50 miles and each weekend day you drive 10 miles. Suppose that gas costs \$3.69 per gallon.

a) How much does each car cost in gas each week?

b) After how many years does car B become more economical, in terms of the total amount of money you have spent on it?