

# 1 Estimations and Models Quiz 1

## 1.1

How many tacos would it take to feed all Sonoma State Students for lunch today?

- a) 200
- b) 2,000
- c) 20,000
- d) 200,000

## 1.2

If every student at Sonoma State held hands, how long of a chain would they make?

- a) 1 mile
- b) 10 miles
- c) 100 miles
- d) 1,000 miles

## 1.3

How many people holding hands to stretch around the world at the equator?

- a) 2,500,000,000 people
- b) 250,000,000 people
- c) 25,000,000 people
- d) 2,500,000 People

## 2 Place Value Quiz 2

### 2.1

Write 5,400,000,000 in Scientific Notation

- a)  $5.4 \times 10^9$
- b)  $5.4 \times 10^8$
- c)  $5.4 \times 10^{10}$
- d)  $5.4 \times 10^7$

### 2.2

Which of these is  $10110_2$  in decimal form?

- a) 18
- b) 20
- c) 22
- d) 24

### 2.3

Convert  $123.12_5$  to a base 10 number

- a) 35.28
- b) 38.28
- c) 40.0
- d) 37.28

## 2.4

Which base needs the most digits to represent 50?

- a) Binary
- b) Base 10
- c) Base 5
- d) Hexadecimal

## 2.5

How many digits do you need to represent one million in base 5?

- a) 5
- b) 7
- c) 8
- d) 9

## 3 Quiz 3

### 3.1

How many years are in 1 billion seconds?

- a) 1 year
- b) 100 years
- c) 30 years
- d) 50 years

### 3.2

How many meters per second are the cars on the 101 travelling?

- a) 3000 meters/second
- b) 300 meters/second
- c) 30 meters/second
- d) 3 meters/second

### 3.3

Tuition is \$3638 per semester. Show the unit conversions and convert this to cost per unit taken. Which is closest?

- a) 250 USD/Unit
- b) 500 USD/Unit
- c) 100 USD/Unit
- d) 1000 USD/Unit

### 3.4

About how many marathons would it take to run around the equator?

- a) 650,000 Marathons
- b) 962 Marathons
- c) 1538 Marathons
- d) 1962 Marathons

### 3.5

Which of these has the same dimensions? A)  $1/2 gt^2$  B)  $1/2 mv^2$  C)  $mgh$

- a) A and B
- b) B and C
- c) A and C
- d) None