

OAKLAND CUSD #5

PRE-CALCULUS

APRIL 27-MAY 1, 2020

WILLIAM SEWELL

Week: April 27-May 1, 2020

Teacher: William Sewell

Communication: email: william.sewell@oakland5.org or Google Hangout-Meet

Office hours: Monday and Wednesday: 12:00 to 2:00 p.m., Tuesday and Thursday: 12:00 to 1:00 p.m.

Due Date: All assignments are due 5/4/2020 either by sending a picture of it and turning it into Google Classroom or turning it into the office.

Assignments: All assignments will be in "Google Classroom" and a paper copy will be provided from the Oakland main office. I will have office hours as listed above which we can review the assignments given and I will help you as much as needed. However, the expectation is the same as it was before. I expect you to have made a serious effort to complete the assignment, before asking for help. You will not learn anything with me just giving you the answers.

Class	Choice 1	Choice 2	Choice 3 (Enrichment)
Earth Science	Collect 15 different rock samples. Take pictures and describe them: shape, various colors, size, sharp sides/ smooth, etc.	Repeat this activity for this week and make a comparison to last week, if you did this activity or wait until next week and compare it then. Take pictures of the moon and record the cycle that it is in from Monday through Friday. Please use the given table to complete. Please refer to page 779 in your book.	Human Impact On Resources Please answer and respond to the following questions and statements. Make a list of five ways humans impact Earth by doing the following for each. 1. State the human impact. 2. Determine whether or not it is positive or negative. 3. State the things which determine the degree of this impact. 4. Is this impact permanent or temporary?
Physical Science	Do speed lab of races. Record your distance and time yourself. Please use the given table to complete.	Graph your data of distance versus time. With distance on the vertical axis and time on the horizontal axis, using the given graph paper.	Chapter 13: Review Worksheet, p.35-36, and the Chapter Test, p. 37-38

Class	Choice 1	Choice 2	Choice 3 (Enrichment)
Chemistry	WS#4 or Unit 4 Test	Do the Unit 5 WS#2. Use dimensional unit conversions to complete. or Unit 5: Relative Mass Lab video and write-up.	Unit 5: Quiz 1
Pre-calculus	Matrix WS #2	WS on Inverse Trig Functions	New problems: Watch videos on Inverse trigonometric functions. They will be assigned in Khan academy.

Matrix Operations

Date April 27 Period _____

Simplify. Write "undefined" for expressions that are undefined.

1) $-4 \begin{bmatrix} 5 & 1 \\ 6 & 0 \end{bmatrix}$

2) $\begin{bmatrix} 6 & -5 & 3 & -5 \end{bmatrix} + \begin{bmatrix} 1 & 0 & 1 & 0 \end{bmatrix}$

3) $-4w \begin{bmatrix} -w & -4+u & 0 \\ v & 5v & 3wv \end{bmatrix}$

4) $\begin{bmatrix} -4 & -5 & 5 \\ 1 & 6 & 3 \\ -2 & 2 & 1 \end{bmatrix} - \begin{bmatrix} -6 & -1 & -6 \\ 6 & -3 & -2 \\ 4 & -1 & -3 \end{bmatrix}$

5) $\begin{bmatrix} -5wu \\ 6 \\ v-1 \end{bmatrix} - \left(\begin{bmatrix} -5v \\ 6v \\ 5u+6 \end{bmatrix} - \begin{bmatrix} -3v \\ -5 \\ 3vu \end{bmatrix} \right)$

6) $\begin{bmatrix} -3y & 3x \\ -2 & -4x+2 \\ y^2 & 2x \end{bmatrix} - \begin{bmatrix} x & x-2 \\ 4 & y \\ x-1 & xy \end{bmatrix}$

7) $\begin{bmatrix} -4b \\ 2b \\ 6b \end{bmatrix} + 2 \begin{bmatrix} 3a \\ ab \\ a+4 \end{bmatrix}$

8) $-5 \left(\begin{bmatrix} 1 & 0 \\ -2 & -3 \\ 6 & -6 \end{bmatrix} + \begin{bmatrix} -5 & 4 \\ -6 & 0 \\ 4 & 4 \end{bmatrix} \right)$

$$9) \begin{bmatrix} 3 & -3 \\ 6 & 3 \end{bmatrix} \cdot \begin{bmatrix} 2 & 6 & 1 \\ 6 & -5 & 4 \end{bmatrix}$$

$$10) \begin{bmatrix} 3 & 1 \\ -3 & -4 \end{bmatrix} \cdot \begin{bmatrix} 1 & -3 \\ -4 & -1 \end{bmatrix}$$

*Sewell Choice #2
Pre-Calculus pg 2 of 2
April 27*

$$11) \begin{bmatrix} 3 & 2 \\ 2 & 1 \\ 3 & 4 \\ -1 & -1 \end{bmatrix} \cdot \begin{bmatrix} 0 & 0 \\ 2 & -6 \end{bmatrix} \cdot \begin{bmatrix} -2 & 6 \\ 0 & 0 \end{bmatrix}$$

$$12) \begin{bmatrix} 4 & -2 \\ -3 & 6 \end{bmatrix} \cdot \left(\begin{bmatrix} 4 & -5 & 4 & 0 \\ 6 & 3 & 0 & -3 \end{bmatrix} \cdot \begin{bmatrix} 2 & 0 \\ -6 & -1 \end{bmatrix} \right)$$

$$13) \begin{bmatrix} 5ab & -1 & 0 \\ ba & 5b & -1 \end{bmatrix} \cdot \begin{bmatrix} b \\ 4 \\ 2b \end{bmatrix}$$

$$14) \begin{bmatrix} 6u & 2u & u^2 \\ uv & v^2 & -2v^2 \end{bmatrix} \cdot \begin{bmatrix} -3u & 1 \\ 6u & 3v \\ -6u & v \end{bmatrix}$$

Critical thinking questions:

15) Give an example of a matrix X that would make the expression AX defined where A is a 5×7 matrix.

16) How many multiplications of two numbers would be required to multiply a 3×5 matrix by a 5×10 matrix?

COVID-19 school closure resources: Daily schedules for students ages 2-18 & remote learning resources. Want to help us help others? We are a nonprofit. Please consider making a donation to help us respond.



Evaluate inverse trig functions Student view

Pr X

A

Was

D 5.33

D 4.45

D 7.90

The following are all angle measures (in radians, rounded to the nearest hundredth) whose sine is 0.43.

Which is the *principal value* of $\sin^{-1}(0.43)$?

Choose 1 answer:

A -5.84

B 0.44

C 6.73

D 13.01

The following are all angle measures (in radians, rounded to the nearest hundredth) whose sine is 0.98.

Which is the *principal value* of $\arcsin(0.98)$?

Choose 1 answer:

A -11.20

B -4.91

C 1.37

D 7.65

The following are all angle measures (in radians, rounded to the nearest hundredth) whose sine is -0.22.

Which is the *principal value* of $\sin^{-1}(-0.22)$?

Choose 1 answer:

A -0.22

B 6.06

C 12.34

D 18.63

Evaluate composite functions
Exercise · 4 questions

HSF.BF.A.1.c

Evaluating composite functions: using tables
Video · 4 minutes

HSF.BF.A.1.c

COVID-19 school closure resources: Daily schedules for students ages 2-18 & remote learning resources. Want to help us help others? We are a nonprofit. Please consider making a donation to help us respond.



Pi X

Evaluate inverse trig functions Student view

W
'as

Students will do 4 of these 18 questions

The following are all angle measures (in radians, rounded to the nearest hundredth) whose tangent is -1.4 .

Which is the *principal value* of $\tan^{-1}(-1.4)$?

Choose 1 answer:

A -4.09

B -0.95

C 2.19

D 5.33

The following are all angle measures (in radians, rounded to the nearest hundredth) whose tangent is 3.7 .

Which is the *principal value* of $\arctan(3.7)$?

Choose 1 answer:

A -4.98

B -1.83

C 1.31

D 4.45

The following are all angle measures (in radians, rounded to the nearest hundredth) whose tangent is -21 .

Which is the *principal value* of $\tan^{-1}(-21)$?

Choose 1 answer:

A -1.52

B 1.62

C 4.76

D 7.90

The following are all

Evaluate composite functions

Exercise - 4 questions

The following are all

The following are all

HSF.BF.A.1c



Evaluating composite functions: using tables

Video - 4 minutes

HSF.BF.A.1c