Tucson International Academy

Academia Internacional de Tucson

Homework Packet for Twelveth Grade

Week 28

Name_____

Week Starts on/ Due on _____

Each week you are to complete your homework packet and turn it on the day the teacher assigns. Part of the homework is reading 45 minutes a day. This can be done in after school care and they can read to a younger sibling or an adult as well. Weekend reading is encouraged, each week students can get credit for reading on Saturday and/or Sunday. Reading each day is very important to help each student get better at this skill.

© ***Reading is Fun!!*** ©

Weekly Home Reading Record

Day	Reading Material	Amount of Time	How many pages
Weekend			
Monday			
Tuesday			
Wednesday			
Thursday			

Total Time Reading: Hours_____ Minutes_____

Student Signature_____ Date_____

Parent Signature_____ Date_____

Questions 12-22 are based on the following passage and supplementary material.

Dark Snow

Most of Greenland's interior is covered by a thick layer of ice and compressed snow known as the Greenland Ice Sheet. The size of the ice sheet fluctuates seasonally: in summer, average daily high temperatures in Greenland can rise to slightly above 50 degrees Fahrenheit, partially melting the ice; in the winter, the sheet thickens as additional snow falls, and average daily low temperatures can drop 12 to as low as 20 degrees.

12

Which choice most accurately and effectively represents the information in the graph?

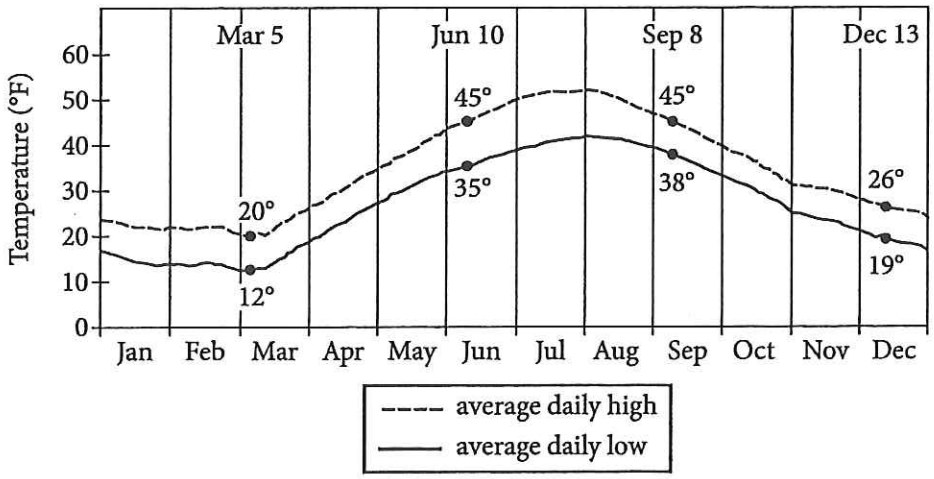
A) NO CHANGE

B) to 12 degrees Fahrenheit.

C) to their lowest point on December 13.

D) to 10 degrees Fahrenheit and stay there for months.

Average Daily High and Low Temperatures Recorded at Nuuk Weather Station, Greenland (1961—1990)



Adapted from WMO. ©2014 by World Meteorological Organization.

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

Typically, the ice sheet begins to show evidence of thawing in late 13 summer. This follows several weeks of higher temperatures. 14 For example, in the summer of 2012, virtually the entire Greenland Ice Sheet underwent thawing at or near its surface by mid-July, the earliest date on record. Most scientists looking for the causes of the Great Melt of 2012 have focused exclusively on rising temperatures. The summer of 2012 was the warmest in 170 years, records show. But Jason 15 Box, an associate professor of geology at Ohio State believes that another factor added to the early 16 thaw; the "dark snow" problem.

13

Which choice most effectively combines the two sentences at the underlined portion?

A) summer, following
B) summer, and this thawing follows
C) summer, and such thawing follows
D) summer and this evidence follows

14

A) NO CHANGE
B) However,
C) As such,
D) Moreover,

15

A) NO CHANGE
B) Box an associate professor of geology at Ohio State,
C) Box, an associate professor of geology at Ohio State,
D) Box, an associate professor of geology, at Ohio State

16

A) NO CHANGE
B) thaw; and it was
C) thaw:
D) thaw: being

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

According to Box, a leading Greenland expert, tundra fires in 2012 from as far away as North America produced great amounts of soot, some 17 of it drifted over Greenland in giant plumes of smoke and then 18 fell as particles onto the ice sheet. Scientists have long known that soot particles facilitate melting by darkening snow and ice, limiting 19 it's ability to reflect the Sun's rays. As Box explains, "Soot is an extremely powerful light absorber. It settles over the ice and captures the Sun's heat." The result is a self-reinforcing cycle. As the ice melts, the land and water under the ice become exposed, and since land and water are darker than snow, the surface absorbs even more heat, which 20 is related to the rising temperatures.

17

A) NO CHANGE
B) soot
C) of which
D) DELETE the underlined portion.

18

A) NO CHANGE
B) falls
C) will fall
D) had fallen

19

A) NO CHANGE
B) its
C) there
D) their

20

Which choice best completes the description of a self-reinforcing cycle?

A) NO CHANGE
B) raises the surface temperature.
C) begins to cool at a certain point.
D) leads to additional melting.

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

[1] Box's research is important because the fires of 2012 may not be a one-time phenomenon. [2] According to scientists, rising Arctic temperatures are making northern latitudes greener and thus more fire prone. [3] The pattern Box observed in 2012 may repeat 21 itself again, with harmful effects on the Arctic ecosystem. [4] Box is currently organizing an expedition to gather this crucial information. [5] The next step for Box and his team is to travel to Greenland to perform direct sampling of the ice in order to determine just how much the soot is contributing to the melting of the ice sheet. [6] Members of the public will be able to track his team's progress—and even help fund the expedition—through a website Box has created. 22

21

A) NO CHANGE
B) itself,
C) itself, with damage and
D) itself possibly,

22

To make this paragraph most logical, sentence 4 should be placed

A) where it is now.
B) after sentence 1.
C) after sentence 2.
D) after sentence 5.

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

Questions 23-33 are based on the following passage.

Coworking: A Creative Solution

When I left my office job as a website developer at a small company for a position that allowed me to work full-time from home, I thought I had it made: I gleefully traded in my suits and dress shoes for sweatpants and slippers, my frantic early-morning bagged lunch packing for a leisurely midday trip to my refrigerator. The novelty of this comfortable work-from-home life, however, 23 soon got worn off quickly. Within a month, I found myself feeling isolated despite having frequent email and instant messaging contact with my colleagues. Having become frustrated trying to solve difficult problems, 24 no colleagues were nearby to share ideas. It was during this time that I read an article 25 into coworking spaces.

23

A) NO CHANGE
B) was promptly worn
C) promptly wore
D) wore

24

A) NO CHANGE
B) colleagues were important for sharing ideas.
C) ideas couldn't be shared with colleagues.
D) I missed having colleagues nearby to consult.

25

A) NO CHANGE
B) about
C) upon
D) for

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

The article, published by *Forbes* magazine, explained that coworking spaces are designated locations that, for a fee, individuals can use to conduct their work. The spaces are usually stocked with standard office 26 equipment, such as photocopiers, printers, and fax machines. 27 In these locations, however, the spaces often include small meeting areas and larger rooms for hosting presentations. 28 The cost of launching a new coworking business in the United States is estimated to be approximately $58,000.

26

A) NO CHANGE
B) equipment, such as:
C) equipment such as:
D) equipment, such as,

27

A) NO CHANGE
B) In addition to equipment,
C) For these reasons,
D) Likewise,

28

The writer is considering deleting the underlined sentence. Should the sentence be kept or deleted?

A) Kept, because it provides a detail that supports the main topic of the paragraph.
B) Kept, because it sets up the main topic of the paragraph that follows.
C) Deleted, because it blurs the paragraph's main focus with a loosely related detail.
D) Deleted, because it repeats information that has been provided in an earlier paragraph.

Unauthorized copying or reuse of any part of this page is illegal.

CONTINUE

Pre-Calculus (12) Week 28

Name: Gary Young

#1 Points possible: 1. Total attempts: 1

Let $f(x) = \dfrac{3x^2 + 7x + 4}{3x^2 - 10x + 8}$

This function has:

1) A y intercept at the point _____

2) x intercepts at the point(s) _____

3) Vertical asymptotes at $x =$ _____

#2 Points possible: 1. Total attempts: 1

For each function, determine the long run behavior

$\dfrac{x^2 + 1}{x^3 + 2}$ has Select an answer ▼

$\dfrac{x^3 + 1}{x^2 + 2}$ has Select an answer ▼

$\dfrac{x^2 + 1}{x^2 + 2}$ has Select an answer ▼

#3 Points possible: 1. Total attempts: 1

Find the horizontal asymptote of $f(x) = \dfrac{2x - 3x^3 + 1}{-5x^3 - x^2 - 2}$

$y =$ _____

#4 Points possible: 1. Total attempts: 1

Let $f(x) = \dfrac{3x^2 - 13x + 12}{3x^2 + 2x - 5}$

This function has:

1) A y intercept at the point _____

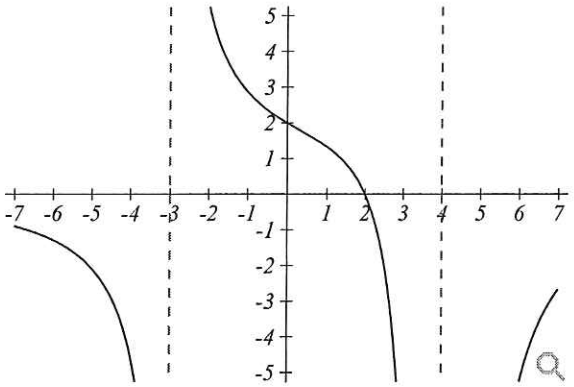
2) x intercepts at the point(s) _____

3) Vertical asymptotes at $x =$ _____

4) Horizontal asymptote at $y =$ _____

#5 Points possible: 1. Total attempts: 1

Write an equation for the function graphed below



$y =$ _____
