



home (/webwork2?user=20cjbs&effectiveUser=20cjbs&key=VuM8LHmeifez0VttPD8S83LcFJaALQHb) /  
 math\_121\_unit\_17\_to\_20 (/webwork2/MATH\_121\_Unit\_17\_to\_20?  
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 / Unit\_17,v2

## Gateway Quiz Unit 17,v2

Your score on this (checked, not recorded) submission is 1.67/3.

The recorded score for this test is 1.67/3.

Time taken on test: 11.57 min (90 min allowed).

The test (which is number 2) may no longer be submitted for a grade. You may still check your answers.

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 user=20cjbs&effectiveUser=20cjbs&key=VuM8LHmeifez0VttPD8S83LcFJaALQHb)

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☒ Show correct answers

☒ Show Solutions

Preview Test

Check Test

### Problem 1. ANSWERS ONLY CHECKED -- ANSWERS NOT RECORDED

(1 point) The temperature adjusted for wind-chill,  $w$ , is a temperature which tells you how cold it feels, as a result of the combination of wind and temperature [see wind-chill (http://www.nws.noaa.gov/om/windchill/)]. See the table below, which gives temperature adjusted for wind-chill,  $w$ , as a function of temperature  $T$  and wind speed  $s$ .

	$T = 35$	$T = 30$	$T = 25$	$T = 20$	$T = 15$	$T = 10$	$T = 5$	$T = 0$
$s = 5$	31	25	19	13	7	1	-5	-11
$s = 10$	27	21	15	9	3	-4	-10	-16
$s = 15$	25	19	13	6	0	-7	-13	-19
$s = 20$	24	17	11	4	-2	-9	-15	-22
$s = 25$	23	16	9	3	-4	-11	-17	-24

Use this table to make tables of the temperature adjusted for wind-chill ( $w$ ) as a function of temperature for wind speeds 10 and 25 mph:

$s = 10$ :

independent variable =								
$T$ =	35	30	25	20	15	10	5	0

dependent variable =								
W =	27	21	15	9	3	-4	-10	-16

s = 25:

independent variable =								
T =	35	30	25	20	15	10	5	0
dependent variable =								
W =	23	16	9	3	-4	-11	-17	-24

Solution:

Note: You can earn partial credit on this problem.

preview answers

Entered	Answer Preview	Correct	Result	Messages
T	T	T	incorrect	
35	35	35	incorrect	
30	30	30	incorrect	
25	25	25	incorrect	
20	20	20	incorrect	
15	15	15	incorrect	
10	10	10	incorrect	
5	5	5	incorrect	
0	0	0	incorrect	
W		w	incorrect	Variable 'W' is not defined in this context
27	27	27	incorrect	
21	21	21	incorrect	
15	15	15	incorrect	

9	9	9	incorrect	
3	3	3	incorrect	
-4	−4	-4	incorrect	
-10	−10	-10	incorrect	
-16	−16	-16	incorrect	
T	$T$	T	incorrect	
35	35	35	incorrect	
30	30	30	incorrect	
25	25	25	incorrect	
20	20	20	incorrect	
15	15	15	incorrect	
10	10	10	incorrect	
5	5	5	incorrect	
0	0	0	incorrect	
W		w	incorrect	Variable 'W' is not defined in this context
23	23	23	incorrect	
16	16	16	incorrect	
9	9	9	incorrect	
3	3	3	incorrect	
-4	−4	-4	incorrect	

-11	-11	-11	incorrect	
-17	-17	-17	incorrect	
-24	-24	-24	incorrect	

At least one of these answers is NOT correct.

### Problem 2. ANSWERS ONLY CHECKED -- ANSWERS NOT RECORDED

(1 point)

What is the distance from the point (10, 7, -5) to the xz-plane?

Distance =

[preview answers](#)

Entered	Answer Preview	Correct
7	7	7

This answer is correct.

### Problem 3. ANSWERS ONLY CHECKED -- ANSWERS NOT RECORDED

(1 point) Without a calculator or computer, match the functions with their graphs in the figures below. Note that two of the functions do not have a matching graph.

(a)  $z = 2 + x^2 + y^2$   

(b)  $z = 2$   

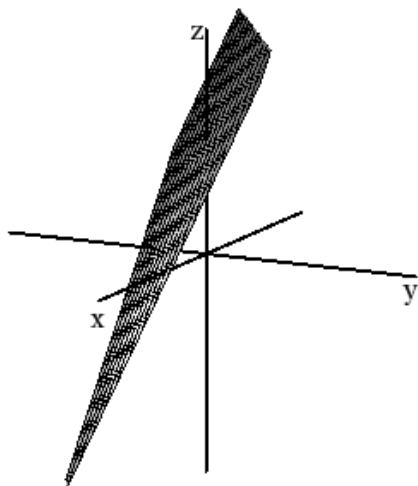
(c)  $z = 2 + x - 2y$   

(d)  $z = 2 - x + 2y$   

(e)  $z = -2$   

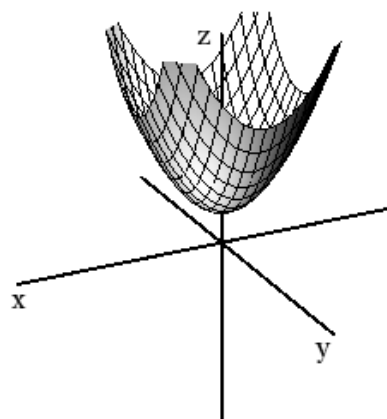
(f)  $z = 2 - x$   

1.



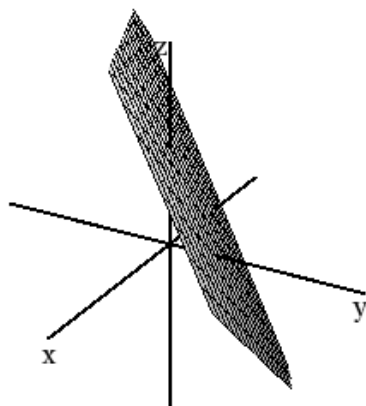
(/webwork2\_files/tmp/MATH\_121\_Unit\_17\_to\_20/images/949eeefb-4b30-3bb7-9af5-556f28d6c899\_\_fc854e63-bdc7-3d87-a76f-212750f2d813.png)

2.



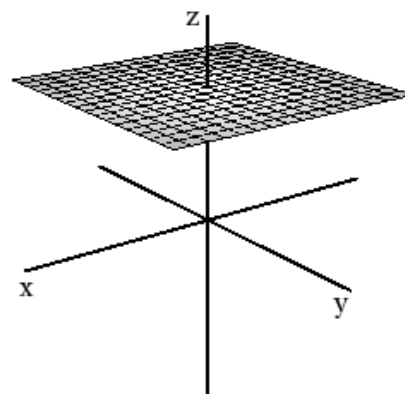
(/webwork2\_files/tmp/MATH\_121\_Unit\_17\_to\_20/images/949eeefb-4b30-3bb7-9af5-556f28d6c899\_\_0037e2b7-558b-32a0-b745-c014614f2dd7.png)

3.



(/webwork2\_files/tmp/MATH\_121\_Unit\_17\_to\_20/images/949eeefb-4b30-3bb7-9af5-556f28d6c899\_\_69fa3821-fe7f-3156-aab7-426e1c33c823.png)

4.



(/webwork2\_files/tmp/MATH\_121\_Unit\_17\_to\_20/images/949eeefb-4b30-3bb7-9af5-556f28d6c899\_\_b79d27ce-8fb3-374e-93ca-1b6b09b8cc55.png)

### Solution:

**Note:** You can earn partial credit on this problem.

preview answers

Entered	Answer Preview	Correct
2	2	2
4	4	4

3	3	3
1	1	1
?	?	none of these graphs
?	?	none of these graphs

At least one of these answers is NOT correct.

**Jump to Problem:** [ 1 2 3 ]

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