

**Lab 01**Name: [WebCT Administrator \(Preview\)](#)Start time: [October 28, 2003 4:02pm](#) : Number of questions: 9[Finish](#)[Help](#)

This set of questions goes with the pages of applets and activities for [Lab 01](#). Use the applets and activities to answer the questions.

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**Question 1 (1 point)**

Refer to lab page 2. Plot the points  $P1=(1,3)$  and  $P2=(3,7)$ . Report the value of the slope  $m$ .

- ☐ a. -2
- ☐ b. -1
- ☐ c. 0
- ☐ d. 1
- ☐ e. 2
- ☐ f. 3

[Save answer](#)**Question 2 (1 point)**

Refer to lab page 2. Suppose  $P1$  is a point in Q IV and  $P2$  is a point in Q III. What can you conclude about the value of  $m$ ?

- ☐ a.  $m$  has to be positive
- ☐ b.  $m$  has to be negative
- ☐ c.  $m$  could be positive or negative

[Save answer](#)**Question 3 (1 point)**

Refer to lab page 2. What happens to the value of  $m$  when  $P1$  and  $P2$  have different  $x$  coordinates but the same  $y$  coordinate? (You can drag the points with your mouse to experiment.)

- ☐ a. The slope is 0
- ☐ b. The slope is 1
- ☐ c. The slope is undefined

Save answer

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#### Question 4 (1 point)

Refer to lab page 3. Pick  $f(x)$  number 3 and enter a linear function that matches it. What is the magic word?

- ☐ a. thin
- ☐ b. ring
- ☐ c. long
- ☐ d. cash
- ☐ e. wish

Save answer

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#### Question 5 (1 point)

Refer to lab page 3. Pick  $f(x)$  number 1 and enter a linear function that matches it. What is the magic word?

- ☐ a. thin
- ☐ b. ring
- ☐ c. long
- ☐ d. cash
- ☐ e. wish

Save answer

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#### Question 6 (1 point)

Refer to lab page 3. Notice the control to the left of the grapher that looks like this:



What effect does it have on the graph that is displayed?

- ☐ a. It shifts the x coordinates of the graph up or down
- ☐ b. It shifts the x coordinates of the graph left or right
- ☐ c. It shifts the y coordinates of the graph up or down
- ☐ d. It shifts the y coordinates of the graph left or right
- ☐ e. It changes the scale of both axes, and zooms in or out.

Save answer

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### Question 7 (1 point)

Refer to the graphing utility on lab page 4. Graph  $f(x) = \frac{4x^3}{x^2 + 1}$  and report on its symmetry. (Observe the symmetry both on the grapher and in the table.)

- ☐ a. The graph is symmetric with respect to the x axis
- ☐ b. The graph is symmetric with respect to the y axis
- ☐ c. The graph is symmetric with respect to the origin

Save answer

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### Question 8 (1 point)

Refer to lab page 4. Suppose  $f(x) = (x^3 - 1)/3$ . Use the table part of the utility to find the value reported for  $f(\text{Pi}/2)$ .

Answer

Save answer

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### Question 9 (2 points)

Refer to lab page 4. Set  $f(x)=1/x$  and choose the automatic x entries option for the table. There is a bug in the parser that makes one of the table entries in error. Study the graph and the table to find the mistake, and write a sentence or two below describing the error.

Equation Create new equation ▼ Equation editor

Save answer

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Finish

Help