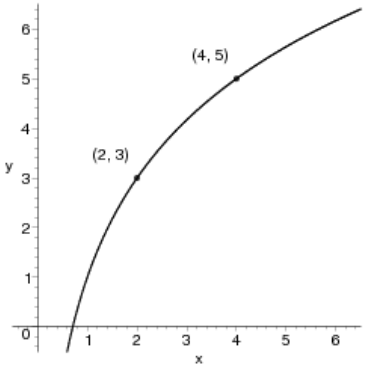
UB 2.1 (4300704)

Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

1. Question Details LarCalc9 2.1.004. [1047684]

Use the graph shown in the figure. Insert the proper inequality symbol (< or >) between the given quantities.



(a) $\frac{f(4) - f(2)}{4 - 2}$? $\frac{f(4) - f(3)}{4 - 3}$

(b) $\frac{f(4) - f(2)}{4 - 2}$? $f'(2)$

2. Question Details LarCalc9 2.1.008.MI. [1341662]

Find the slope of the tangent line to the graph of the function at the given point.

$g(x) = 5 - x^2$; $(1, 4)$

3. Question Details LarCalc9 2.1.017. [1047688]

Find the derivative by the limit process.

$f(x) = x^2 + x - 1$

$f'(x) =$

4. Question Details LarCalc9 2.1.025. [1196844]

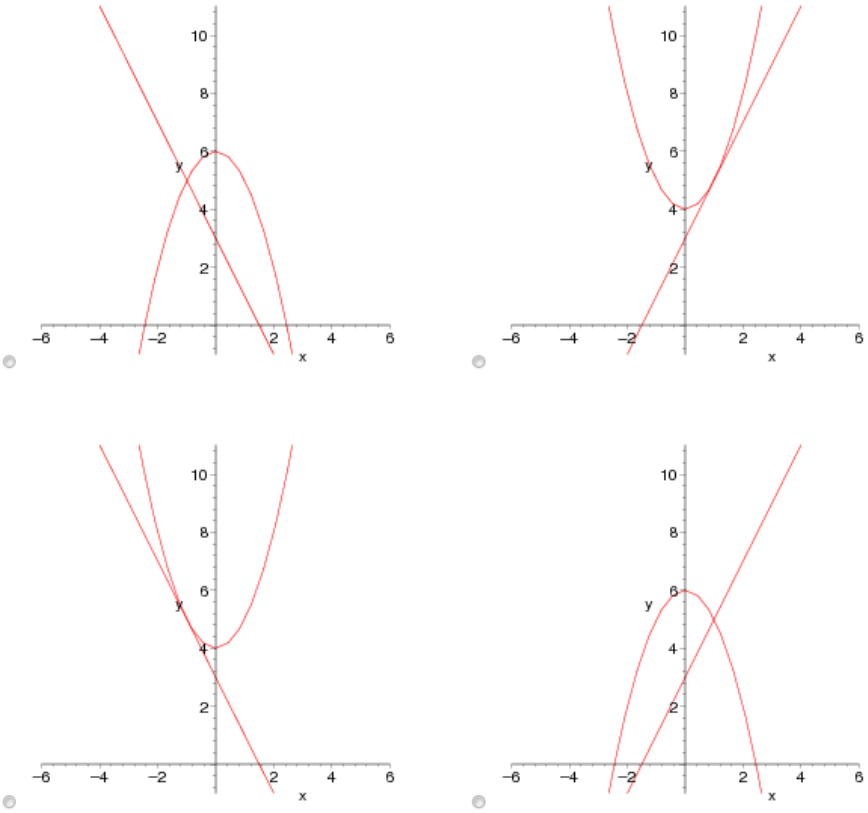
Consider the following function.

$f(x) = x^2 + 4, \quad (1, 5)$

(a) Find an equation of the tangent line to the graph of f at the given point.

$y =$

(b) Use a graphing utility to graph the function and its tangent line at the point.



5. Question Details LarCalc9 2.1.029. [1197018]

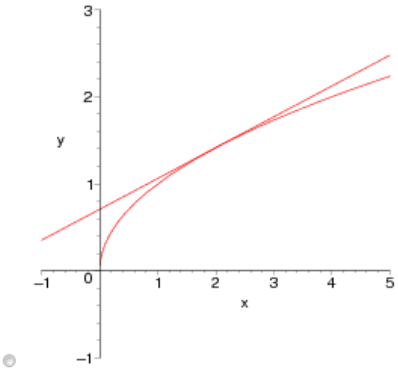
Consider the following function.

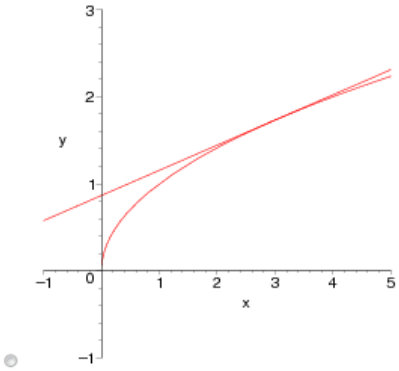
$\sqrt{x}$, (1, 1)

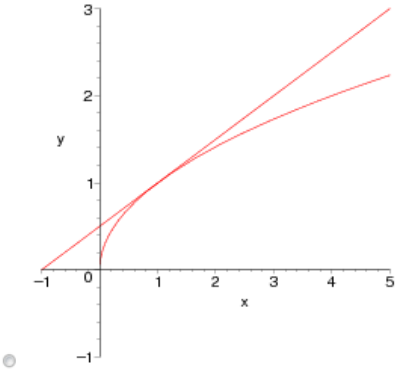
(a) Find an equation of the tangent line to the graph of f at the given point.

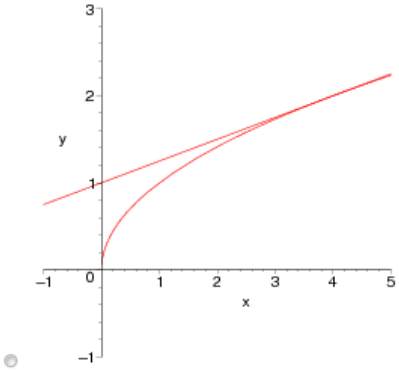
$y =$

(b) Use a graphing utility to graph the function and its tangent line at the point.









6. Question Details LarCalc9 2.1.031. [1197008]

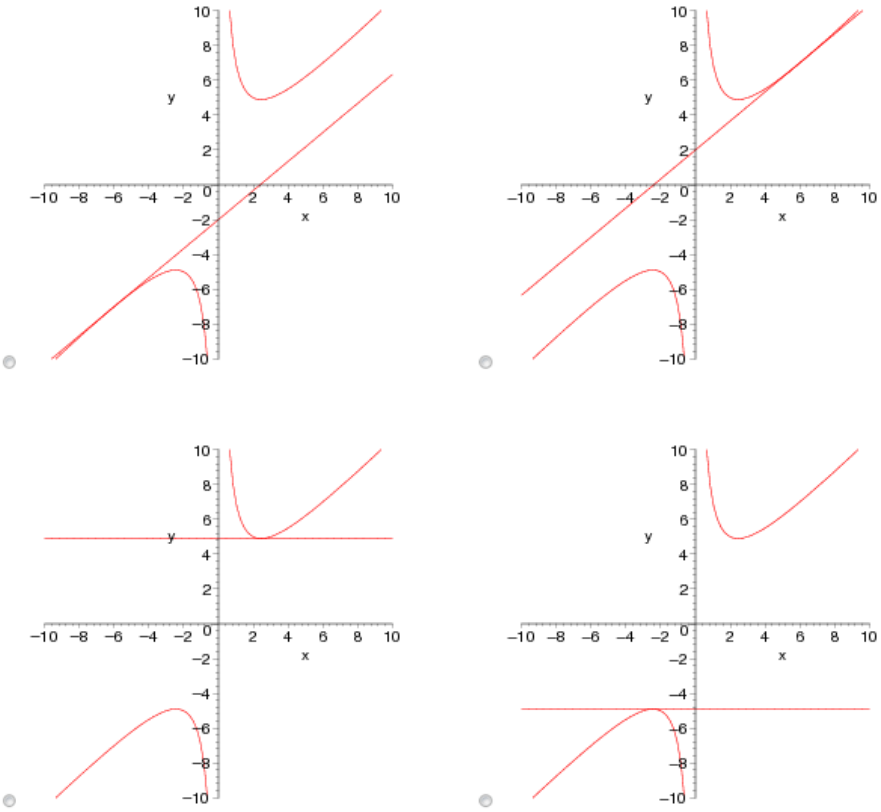
Consider the following function.

$f(x) = x + \frac{6}{x}$, (-6, -7)

(a) Find an equation of the tangent line to the graph of f at the given point.

$y =$

(b) Use a graphing utility to graph the function and its tangent line at the point.



7. Question Details LarCalc9 2.1.033. [1197073]

Find an equation of the line that is tangent to the graph of *f and* parallel to the given line.

Function	Line
$f(x) = x^2$	$10x - y + 25 = 0$

STEP 1: Find $f'(x)$ using the limit definition of the derivative.

$f'(x) =$

STEP 2: Find the slope m of the given line.

$m =$ [ ]

STEP 3: Equate $f'(x)$ with the slope and solve for x.

$x =$ [ ]

STEP 4: Find the corresponding y value by substituting x into $f(x)$.

At the point $(x, y) =$ ([ ]) the tangent line of $f(x)$ is parallel to $10x - y + 25 = 0$.

STEP 5: Use the results of Step 2 and Step 4 with the point-slope formula to find the equation of the line.

$y =$

8. Question Details LarCalc9 2.1.034. [1197730]

Find an equation of the line that is tangent to the graph of *f* and parallel to the given line.

Function	*Line*
$f(x) = 2x^2$	$2x - y + 5 = 0$

$y =$

Assignment Details

Name (AID): **UB 2.1 (4300704)**
Submissions Allowed: **5**
Category: **Homework**
Code:
Locked: **No**
Author: **Goldsworthy, William (** bgoldsworthy@soroschool.org **)**
Last Saved: **Jul 10, 2013 11:05 AM EDT**
Permission: **Protected**
Randomization: **Person**
Which graded: **Last**

Feedback Settings
Before due date
Question Score
Assignment Score
Publish Essay Scores
Question Part Score
Mark
Add Practice Button
Help/Hints
Response
Save Work
After due date
Question Score
Assignment Score
Publish Essay Scores
Key
Question Part Score
Solution
Mark
Add Practice Button
Help/Hints
Response