

Precalc – Warm Up – 2/7/11

Name:_____ Period:_____

1) Consider the function $f(x) = 2x + 6$.

a) Find $f(3)$

b) Find $f(3.5)$

c) Find $f(3.8)$

d) Find $f(3.9)$

e) Without calculating, guess the value of $f(4)$

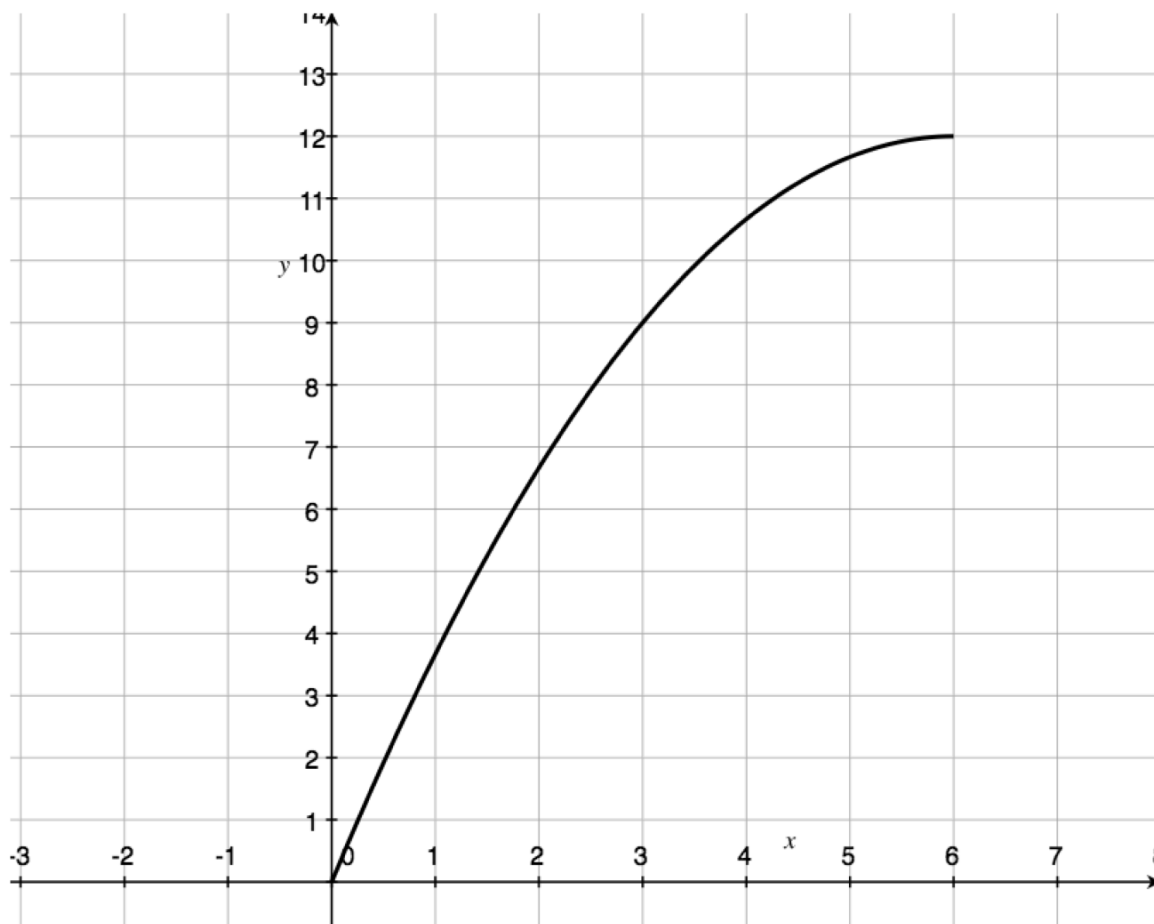
Precalc – Take it to the limit – 2/7/11

Name: _____

Period: _____

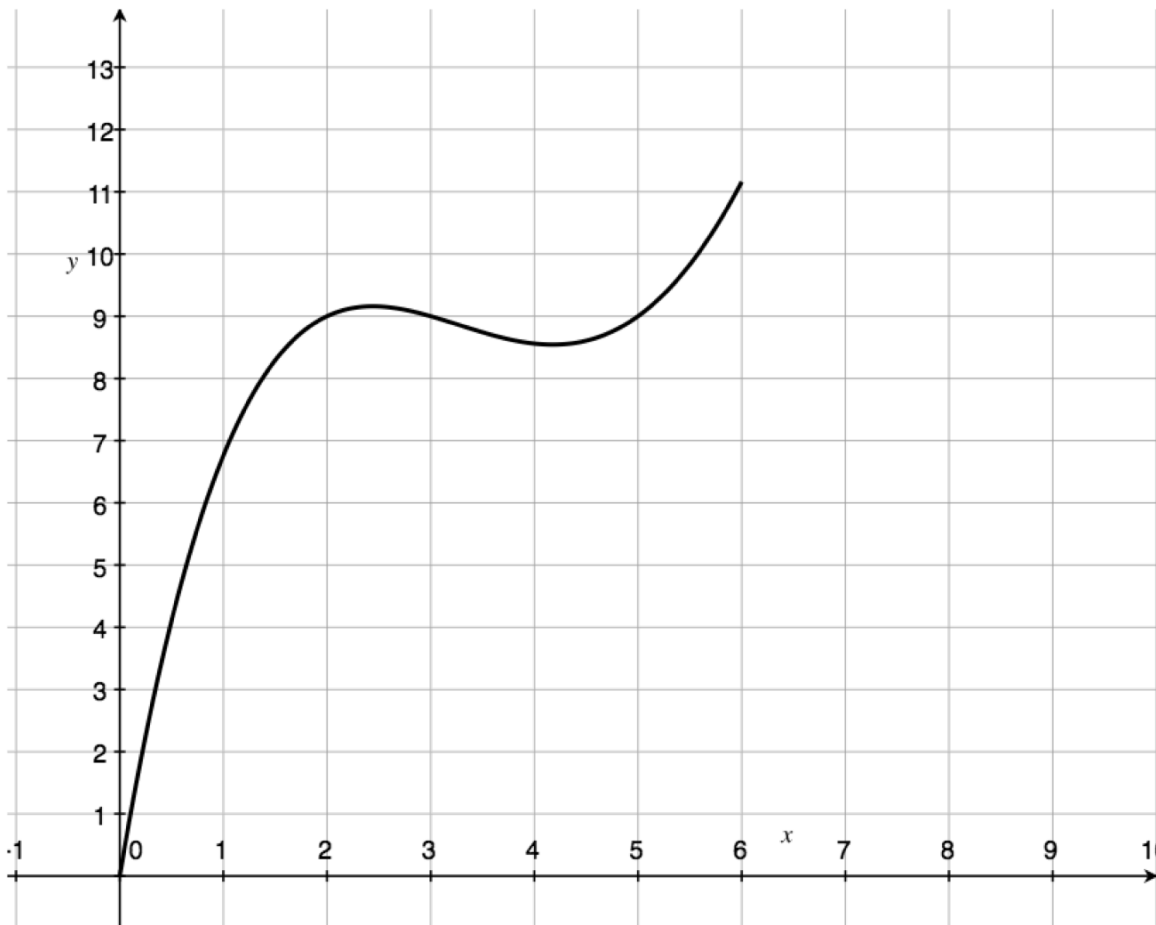
Students will be able to identify limits graphically
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- 1) Ms. Hanna lives at the bottom of a hill and Ms. Heinegg lives at the top of the hill. The top of the hill is 12 meters high. They draw a rough sketch of the hill below.



They plan that Ms. Heinegg will walk down the hill and Ms. Hanna will walk up the hill to meet for dinner. The restaurant is on the hill at $x=3$. What will their height be when they meet?

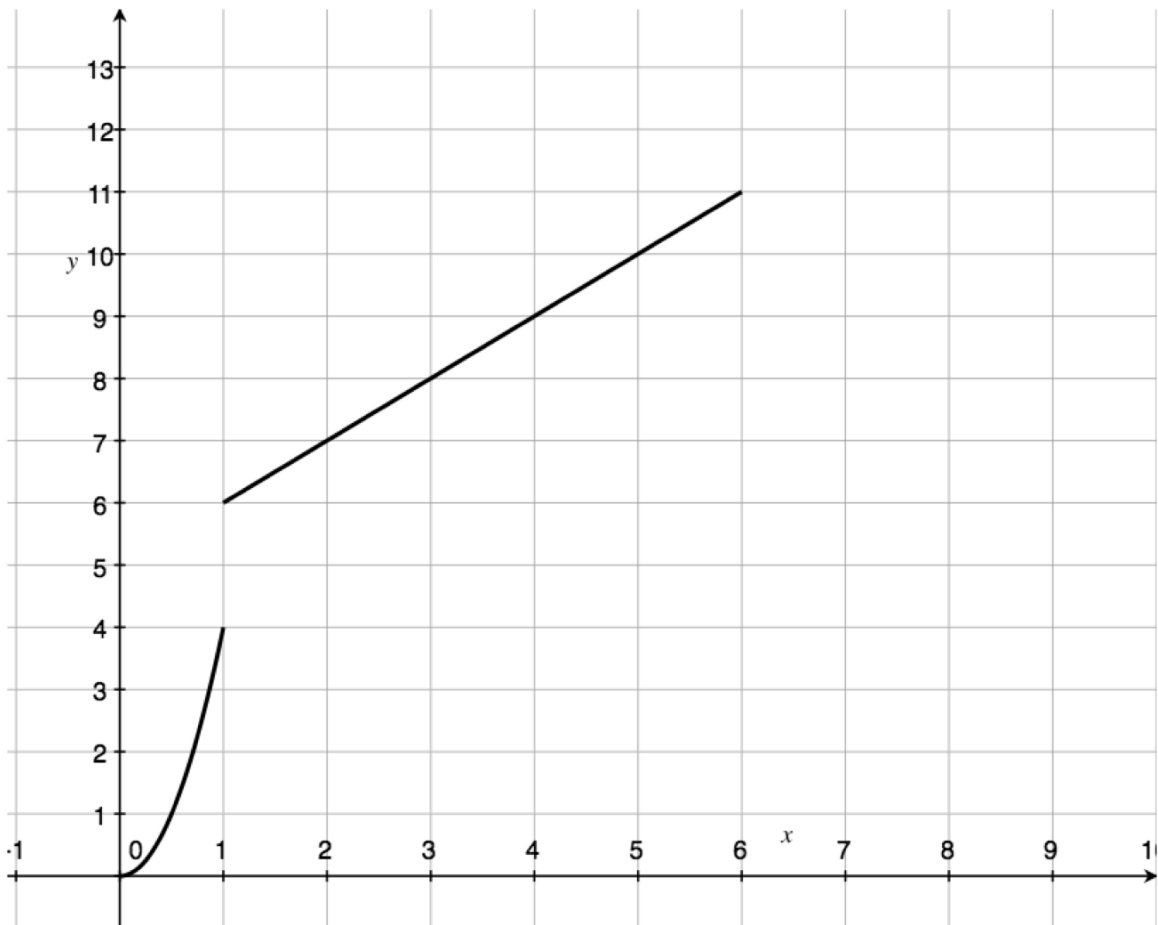
Now, they decide that their sketch is too simple and they take more accurate measurements and make a new sketch.



How high will they be if they meet at $x=5$?

$x=1$?

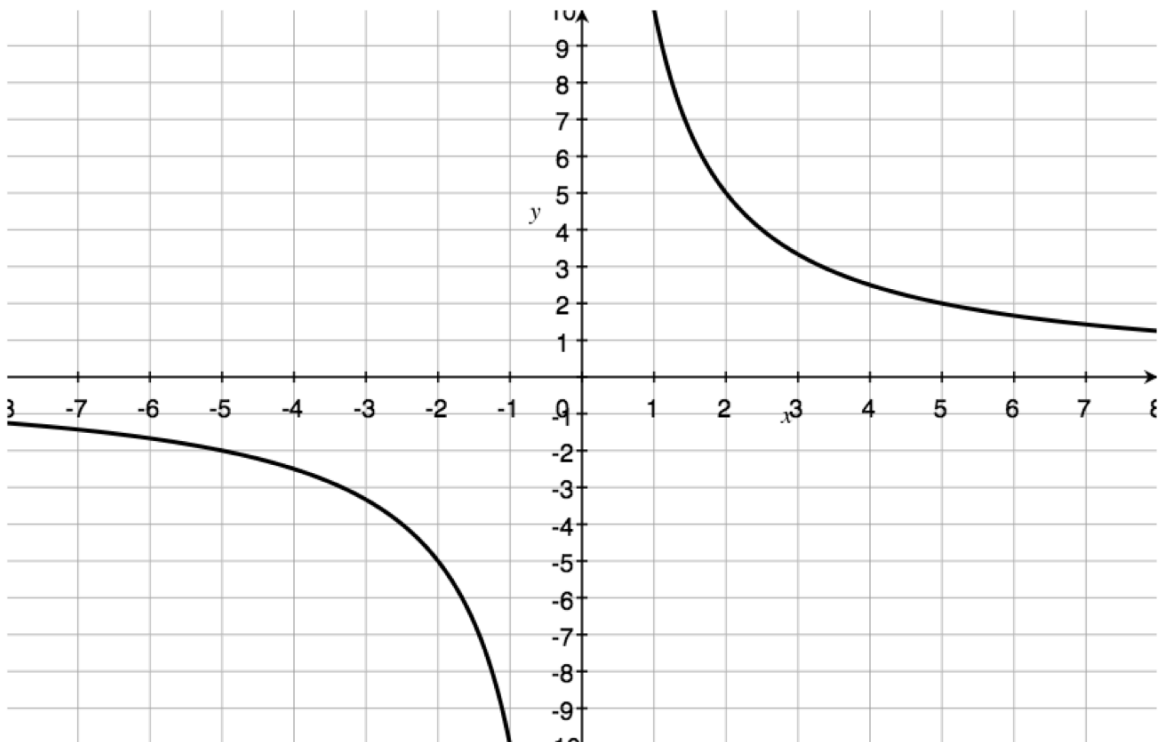
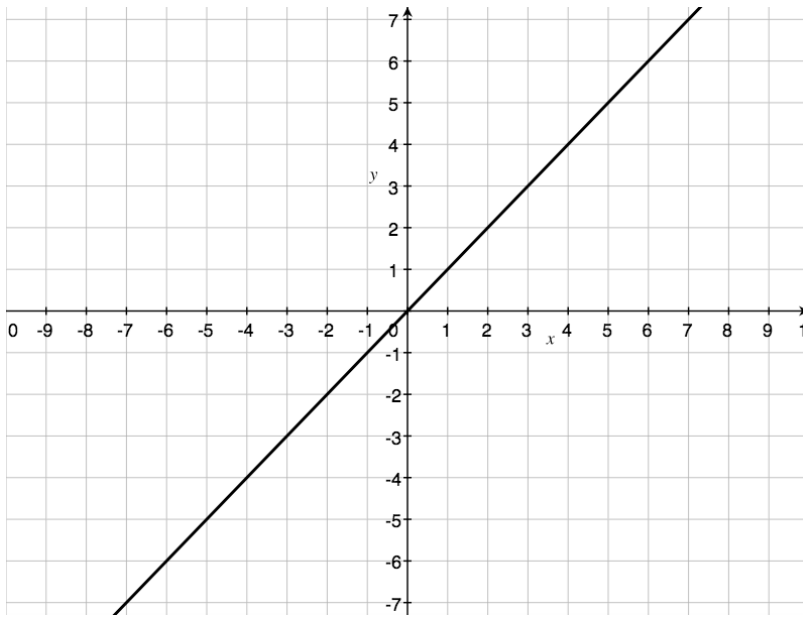
Now, they discover a cliff between their two houses. Their new sketch of the hill is below.

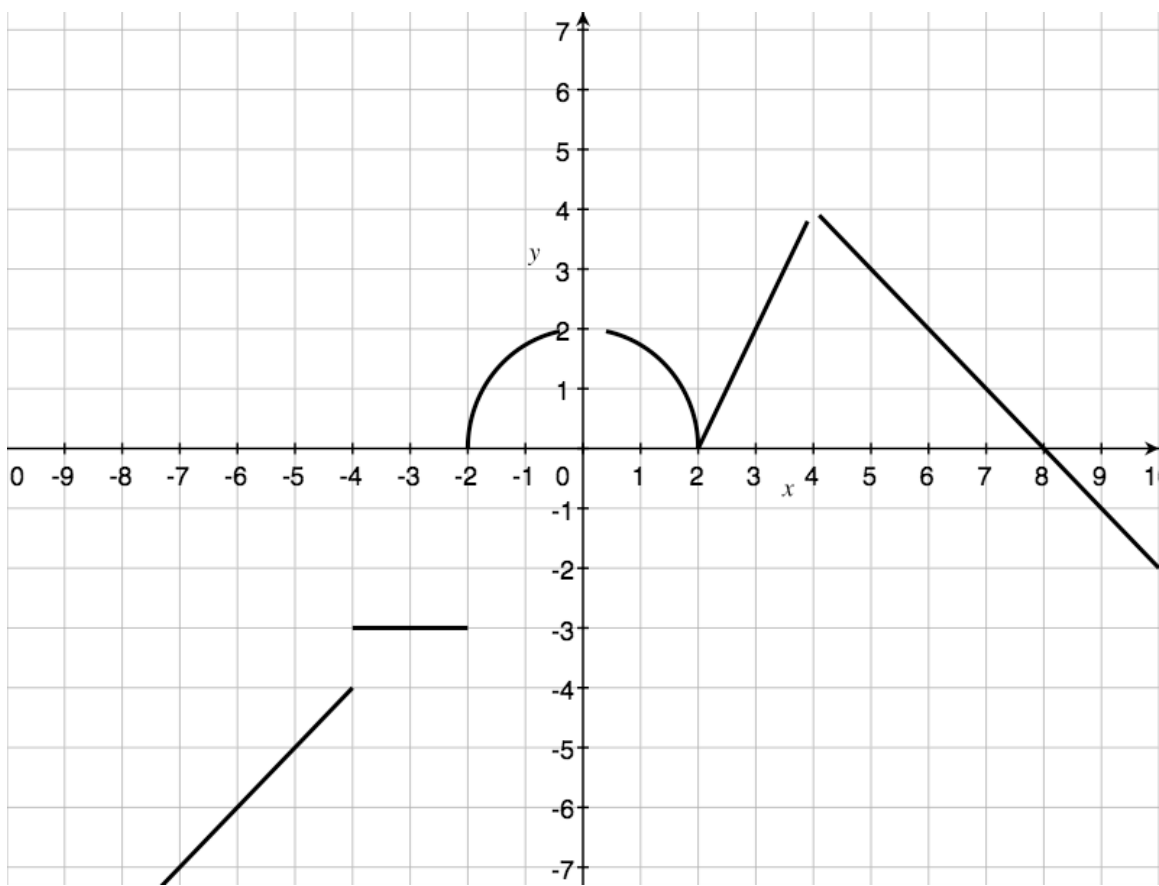


How high will they be if they meet at $x=1$?

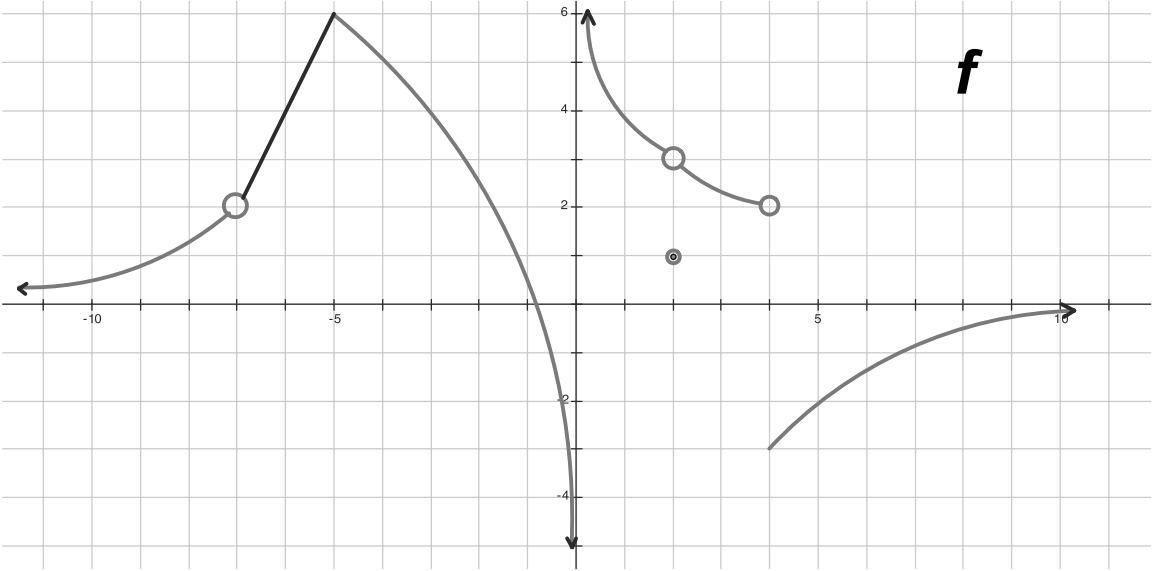
NOTES ON LIMITS.

Examples





Practice

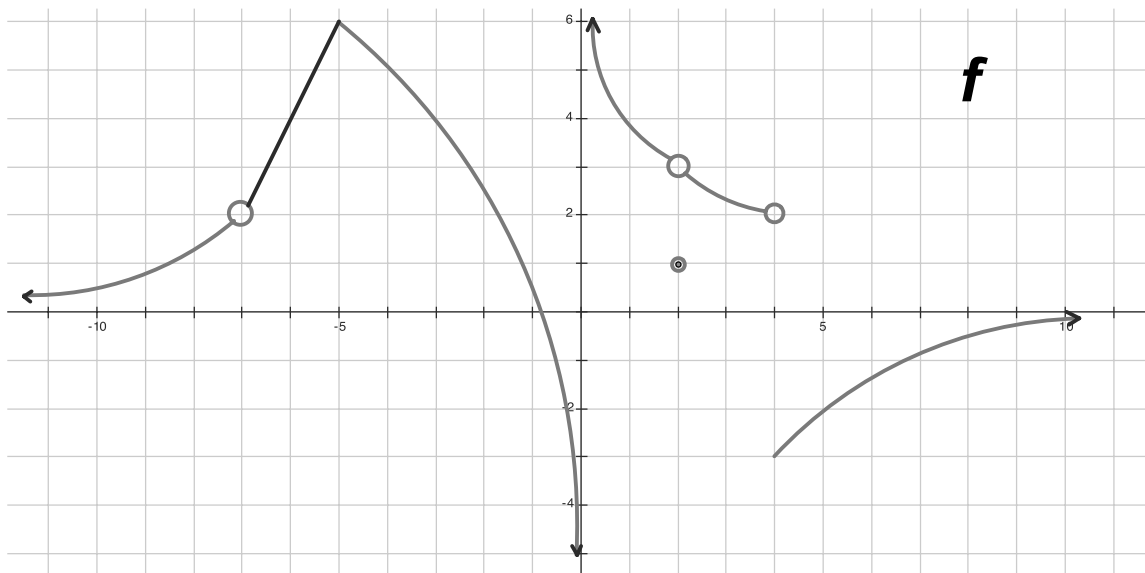


Precalc – Exit Slip – 2/7/11

Name: _____

Period: _____

Find the following limits using the graph.



1) Find $\lim_{x \rightarrow 6} f(x) =$

2) Find $\lim_{x \rightarrow -7} f(x) =$

3) Find $\lim_{x \rightarrow 0} f(x) =$