You wish to purchase a motorcycle. The dealership offers 10 year mortgages at 9.9% interest. You can afford to have monthly payments of no more than \$400. What is the most expensive motorcycle you can purchase under these conditions?

<u>Xmin</u> =	1	
Xmax =		1
Ymin =		
Ymax =		

1) Suppose you and your spouse can afford mortgage payments of no more than \$ 4,000. The bank that is giving you a mortgage offers 30-year mortgages at 5 % interest. How much money can you and your spouse mortgage to buy a home?

<u>Xmin</u> =	1	
<u>Xmax</u> =		
<u>Ymin</u> =		
Ymax =		

2) Your dream home is for sale for \$ 600,000. You can afford mortgage payments
(not including school taxes) of no more than \$3,000. By how much does the home
need to be decreased so that you can afford the mortgage if a bank is offering you a
30-year mortgage at 4.99 %?

Xmin =	1	
Xmax =		1
<u>Ymin</u> =		
Ymax =		

You wish to pay

\$ 1600.00 a month on a 30-year mortgage. If you plan on mortgaging \$ 275,000 after a down payment, find the interest rate that you would need to get from the bank.

<u>Xmin</u> =	1	
<u>Xmax</u> =		1
<u>Ymin</u> =		
Ymax =		

3) A Winnebago dealership offers 15-year mortgages of their RVs at 8.25 % interest. You can afford to have monthly payments of no more than \$ 550. What is the most expensive RV you can purchase under these conditions?

<u>Xmin</u> =	
Xmax =	
Ymin =	
Ymax =	

4) You wish to purchase a new Mercedes-Benz. Mercedes-Benz offers financing for 6 years at 4.99 % interest. If you can afford car payments of \$800 a month, what is the most expensive Mercedes-Benz you can afford?

	2
Xmin =	1
Xmax =	1
<u>Ymin</u> =	
<u>Ymax</u> =	
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