

Q1: Assuming that  $T(x)$  is a differentiable function that decreases with  $x$ , which statement is always true?

a)  $T < 0$

d)  $dT/dx > 0$

b)  $T > 0$

e) I don't know!

c)  $dT/dx < 0$

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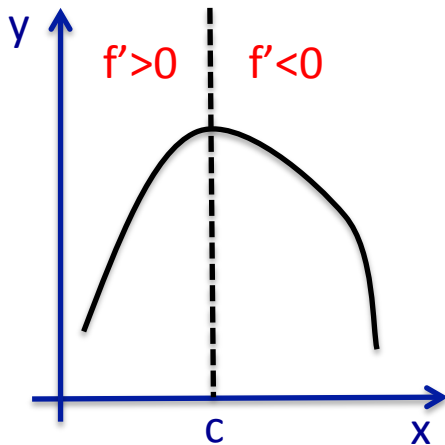
**c)  $dT/dx < 0$**

Q1: Assuming that  $c$  is the location of a local maximum of function  $f$ , which statement is always true?

- a)  $df/dx$  changes sign from negative to positive at  $c$
- b)  $df/dx = 0$
- c)  $df/dx$  changes sign from positive to negative at  $c$
- d) None of the above!
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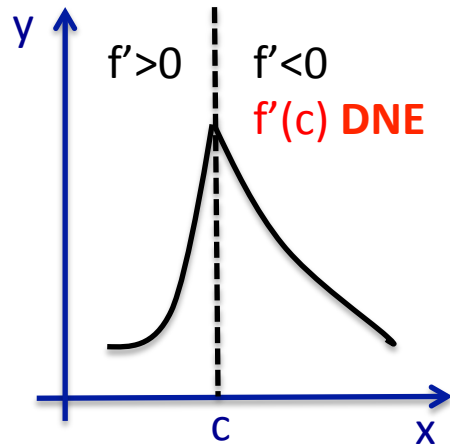
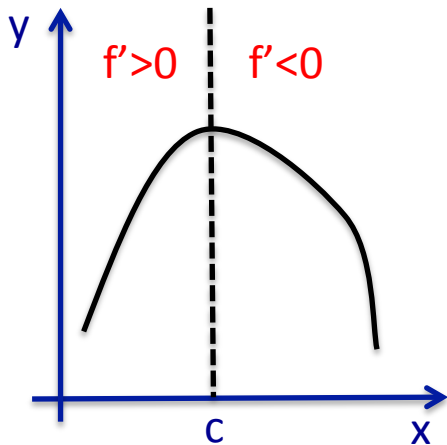
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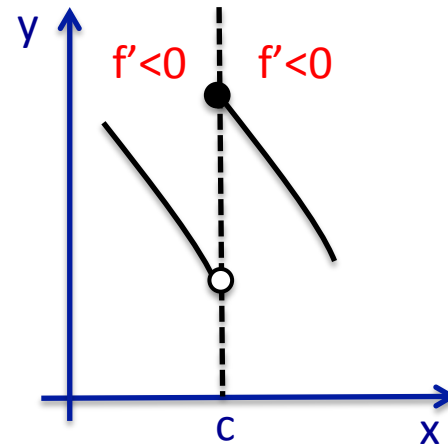
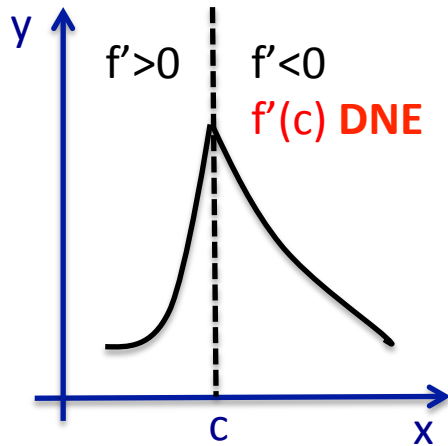
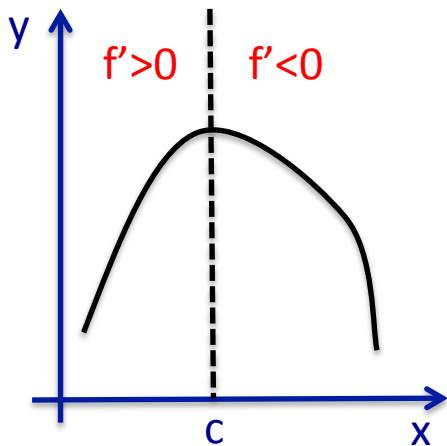
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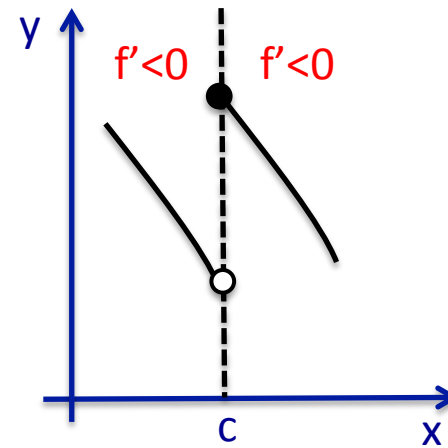
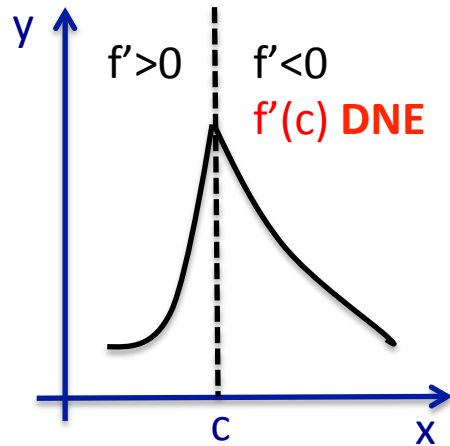
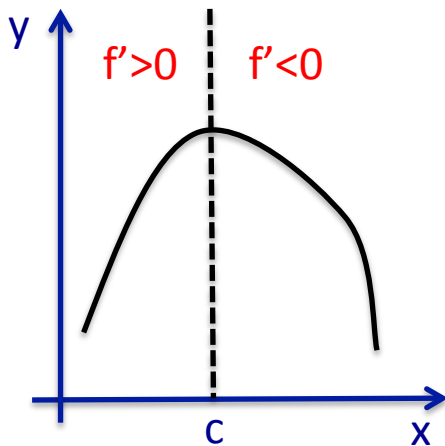
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$$e^x x^{2/3}$$

