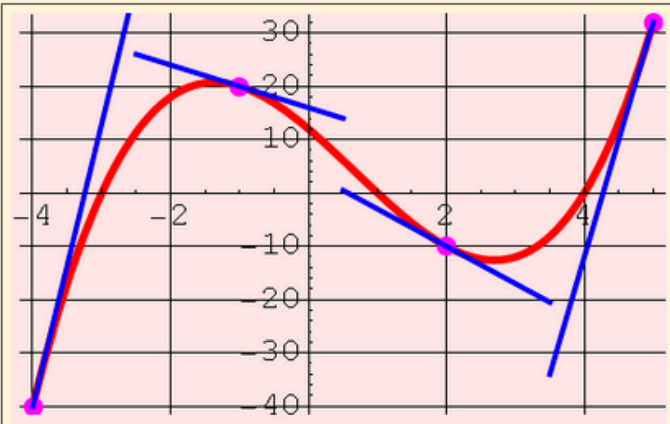
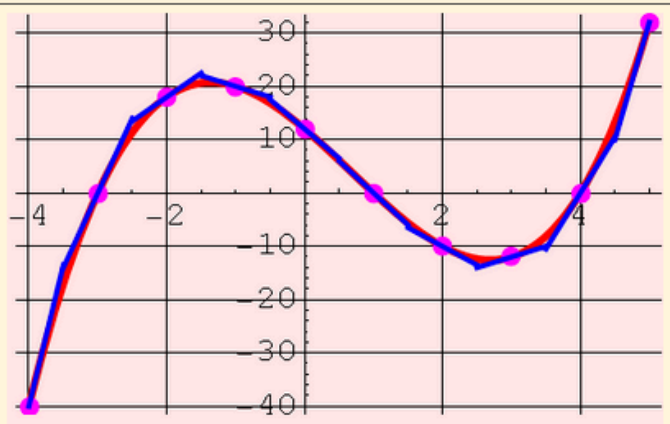


MAT129 Exercise:

using average rate of change to estimate instantaneous rate of change

| | |
|---|---|
|  |  |
| <p>Instantaneous rates of change (slopes of tangent lines)</p> | <p>can be approximated using data. Let's try! We also note that the function can be approximated well by snippets of tangent lines.</p> |

Estimate the instantaneous slopes at left, using the points at right. There is not just one correct answer: you're estimating, and you want to produce the best estimates you can!

| x | F(x1) | F(x2) | x2-x1 | slope |
|----|-------|-------|-------|-------|
| -4 | | | | |
| -1 | | | | |
| 2 | | | | |
| 5 | | | | |