

Name: _____

You have five minutes to complete the following problem, without using your notes or your book.

For some painkillers, the size of the dose given, D , depends on the weight of the patient, W . Thus $D = f(W)$, where D is in milligrams and W is in pounds.

(a) Interpret the statements $f(140) = 120$ and $f'(140) = 3$ in terms of this painkiller.

(b) Use the information in the statements part (a) to estimate $f(145)$.