

CHAPTER 1

A Useful Formula

1. Disappearing Deductibles

On p. 29 Brown gives an example of a disappearing deductible. He does not, however, give a general formula. Here it is:

Assume that up to A dollars, we have a deductible of D_o . Our deductible disappears linearly for claims between A and B , vanishing at B . Then for a loss of L between A and B the deductible is

$$D = \frac{B - L}{B - A} D_o.$$

You can check that this is correct by noting that at $L = A$ this formula yields D_o while at $L = B$, it yields 0.

To solve Example 2.1 on p. 29 of Brown, for example, we apply this formula with $B = 2000$, $A = 1000$, $D_o = 250$, and $L = 1300$.