



**FIGURE 28.4.** The exponential function  $e^x$  has a slope equal to its value. In other words, it satisfies the differential equation  $dn/dx = n$ . This is illustrated in the graph, which shows slopes of 1, 2, 4 when  $e^x = 1, 2, 4$ , respectively. The *shaded triangles* illustrate the gradients at points where  $e^x = 1, 2, 4$ . Recall that the slope  $dn/dx$  is the ratio between the vertical and horizontal edges of the triangles.