The jigsaw border piece formula

Let the aspect ratio be k, the number of pieces n, where n is large, and the number of border pieces b. Suppose there are a pieces down the side, and therefore ka along the bottom. We have $n = ka^2$, $b \approx 2(k + 1)a$. Substituting for $a, b \approx 2(k + 1)\sqrt{\frac{n}{k}}$. With $k = \frac{10}{7}$, n = 2000, $b \approx 180$.