The line $\frac{x}{a} + \frac{y}{b} = 1$, where *a* and *b* are positive constants, intersects the *x*- and *y*-axes at the points *A* and *B* respectively. The mid-point of *AB* lies on the line 2x + y = 10 and the distance AB = 10. Find the values of *a* and *b*.