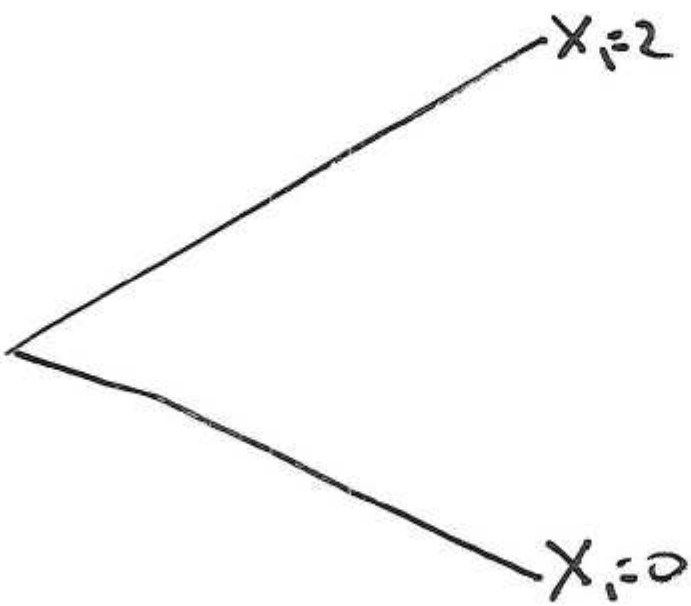
$P(\text{Ruin} \mid X_1) =$



$R_2 = R^2$

by part (a)