Let w be print made, $\times$ amount bide

$E(w) = P(w = x - 100) \times (\oplus x - 100) + P(\omega = 0) \times 0.$

$= P(w = x - 100) \times (x - 100).$

$y = \min$ (the nard)

$P(\text{ win bid }) = P(w - X - 100)$

$= P(x < y).$

$$= \left[\frac{1}{70}t\right]_x^{140}$$

$$= 2 - \frac{x}{70}.$$

$$E(n) = \left(2 - \frac{x}{70}\right)(x - 100)$$

$$= 2x - \frac{1}{70}x^2 - 200 + \frac{10}{7}x$$

$$\frac{d(10)}{dx} = 2 - \frac{1}{35}x + \frac{2^2}{7}$$

$$x = 2(35) + \frac{10}{7}(35)$$

$$= 120.$$