$EU(\tilde{p}) = 0.4(15) + 0.35(20) + \cdots + 0.05(40)$
$= 6 + 7 + 3.354102 + 1.172604 + 2$
$= 19.526706$

$q = (1, 400)$
$EU(q) = 20$
$u(400)$

☆ Expected Utility w/ Subjective Uncertainty ☆

- Subjective Expected Utility
  → Basics of the Model
  * There are 2 primitive concepts:
    1) S = set of possible states of the world (complete description and resolution of all uncertainty)
       Ex) $s_1, s_2, s_3, s_4 \in S$
    2) X = set of consequences (outcomes or prizes)
       Ex) $x, y, z \in X$
  * The objects of choice are called acts rather than lotteries.
    → Short for a "course of action"
    → An act generates an outcome in every possible state, $f: S \to X$, i.e. $f(s_1) = x$, $f(s_2) = z$, $f(s_3) = y$, $f(s_4) = y$
  * Instead of looking at preferences over lotteries, we'll look at preferences over acts.
  → States
  * a possible description of the world, $s \in S$
  * There's one true state of the world
  * An event is a subset of S, denoted $E \subset S$
  * The true state of the world is uncertain