

Mean score acquirable 1 rest. = 50

“ “ “ 2 rest.

First x, sec y
 s
 if $x > 50$ do x
 else $x y$

50 $\therefore 2s \text{ prob } 1=s$

$$\int_s^1 2x dx + \int_0^s \int_0^s (x+y) dx dy$$

$$1 - s^2 + s^2/2 + s/2$$

$$1 + s/2 - s^2/2 \quad s = 1/2 \quad \mathbf{1 \frac{1}{8}}$$

$$P_0 > 1/2$$

98 is P. If $P < P_0$ try x : if $x < P$

If $P < P_0$ try x : if $x < P$ then if $P < 50\%$ try y $y + x = P^2/2 + \frac{1}{2}$
 : if $x < P$ and if $P > 50\%$ do P $x + P$

if $x > P$ and $x < 50\%$ try y $x + y$ **???**
 and $x > 50\%$ try x $2x$

If $P > P_0$ do $P + P$

If x is



- If $P > P_0$ ~~$2P_0$~~ $2P$ $2P$
- If $P_0 > P > 1/2$ try x. If $x > P$ score $2x$ $1 - P^2$
 If $x < P$ score ~~$2P$~~ $\frac{2P^2}{2}$ $1 + P^2/2$
 $x + P$ $P^2/2 + P^2$

- If $1/2 > P$ try x. If $x < P_0$ try y score $x + y$ at $1/8 + 1/4 = 9/8$
 If $x > 1/2$ score $2x$ at $(1 - 1/4)$
~~If $P_2 < x < P < x < 1/2$ try y score~~

$$1 + P_0^2/2 - 2P_0 = 0$$

\therefore If $P < 1/2$ x , if $x < 1/2$, y
 else x

$$2P_0 = 1.172 = 1 + P_0^2/2$$

$$1 \pm \sqrt{1 - 1/2} \quad \mathbf{2}$$

If $.586 > P > .500$ x : ~~P_0~~ $x > P$: $x \neq$
 : $?$ $x < P$: P

$$2 \pm \sqrt{4 - 2} = .586$$

If $P > .586$ P P

$$P_0 = 2 - \sqrt{2} \quad P_0^2 = 6 - 4\sqrt{2} \quad 4 - 2\sqrt{2}$$

