

1 Logarithmic scoring rules for Canteen Dilemma

1.1 Payoff for both going to the office:

Calculated by $\ln(\text{playerCertainty}) \cdot 2$

- Very uncertain (50%) = - \$1.39
- Slightly uncertain (62.5%) = -\$0.94
- Somewhat certain (75%) = -\$0.57
- Quite certain (87.5%) = -\$0.27
- Very certain (99%) = -\$0.02

1.2 Payoff for both going to the canteen

Calculated by $\ln(\text{playerCertainty})$

- Very uncertain (50%) = - \$0.69
- Slightly uncertain (62.5%) = -\$0.47
- Somewhat certain (75%) = -\$0.29
- Quite certain (87.5%) = -\$0.13
- Very certain (99%) = -\$0.01

1.3 Payoff for both going to the canteen

Calculated by $\ln(1 - \text{playerCertainty}) \cdot 2$

- Very uncertain (50%) = - \$1.39
- Slightly uncertain (62.5%) = -\$1.96
- Somewhat certain (75%) = -\$2.77
- Quite certain (87.5%) = -\$4.16
- Very certain (99%) = -\$9.21