

Name:

Five Minute Exercise

Exploration and Expected Drilling

Given:

Known deposits: 780 bbl

Two periods, each with demand: $W2P_i = 500 - Q_i$

Cost of an exploratory well: \$20

Probability of a find: 25% chance of 1 bbl per well

MEC_i: \$20 per bbl (both known and discovered resources)

Interest rate is 100%

Determine:

The expected number of wells drilled in equilibrium. You may assume that exploration is used.

Answer: