

Name:

### **Five Minute Exercise**

#### *The Effect of a Backstop Resource*

**Given:**

Total oil available: 800 bbl

Two periods, each with demand:  $W2P_i = 550 - (1/2)*Q_i$

MEC<sub>i</sub>: \$50 per bbl

Backstop available at MC<sub>b</sub> = \$350 per bbl

Oil in the reservoir is NOT common property.

Interest rate is 100%

**Determine:**

How much the backstop *lowers* the equilibrium price in the *first* period (that is, the *change* in P relative to what it would be if there were no backstop).

Answer: