3.3 practice problem answers

3.3.1

a) BEQ = TFC ÷ contribution per unit
   BEQ = \$200,000 ÷ (\$35 − \$10)
   BEQ = 8,000 units

b) TR = P × Q
   TR = \$35 × 8,000 units
   TR = \$280,000

c) TC = TFC + TVC
   TC = \$200,000 + (\$10 × 8,000 units)
   TC = \$280,000

3.3.2

a) MOS = level of output − BEQ
   MOS % = MOS ÷ BEQ

   → missing figure a
   300 = output − 500
   800 = output
   800 units of Play-It

   → missing figure b
   MOS = 500 − 250
   MOS = 250
   250 units of Tread-It

   → missing figure c
   MOS % = 300 ÷ 500
   MOS % = 60% for Play-It

b) Tread-It has a better MOS than Play-It when measured as a percentage (100% and 60% respectively. Play-It has a better MOS in absolute terms (300 units vs 250 units for Tread-It). In this case, it's better to use the first method because we're making a comparison across different industries (hiking boots and toys). So Tread-It has a better MOS.