



NAME

DATE

## HANDOUT PROBLEM 20 OCT 002

**GIVEN:** A SOLID STEEL SHAFT IS USED TO TRANSMIT 5 HP AT 175 RPM BETWEEN A MOTOR AND A BELT DRIVE. IF THE ALLOWABLE SHEAR STRESS IS 14.5 KSI, DETERMINE THE REQUIRED DIAMETER OF THE SHAFT TO THE NEAREST 1/8 IN.

**REQUIRED:**

**SOLUTION:**

