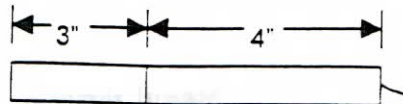
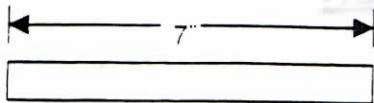


Grade 9 Lathe Tutorial!

Two Piece Pen

Use the following steps to help you in your fabrication of the pen.
You will also be required to obtain a 'Bic' style insert for the pen.

- 1) Cut appropriate stock (1/2" aluminum) to 7" length and file burrs

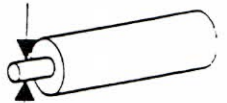


- 2) Layout and hacksaw to length one half of the pen at 4"

- 3) Endface and centre drill all ends

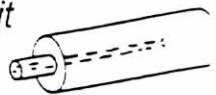


.250

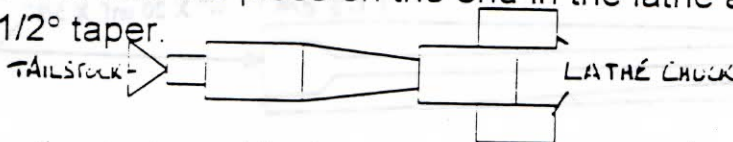


- 4) Parallel turn one end of the male (short) piece to .250" x 3/8" (1 cm) long.

- 5) With the drill chuck attachment inserted in the tailstock use a 1/8" drill bit and to the full depth of the bit on the .250" end only. *Clean the drill bit*

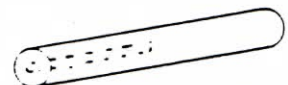


- 6) Layout and hold the piece on the end in the lathe and set up for the 2-1/2° taper.

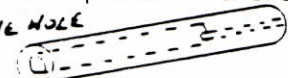


- 7) Holding the male end in the chuck and using the tailstock to support the other end, cut the 2-1/2° taper using the compound rest handwheel. Cut off the remainder with a hacksaw and endface smooth.

- 8) Insert the next (long) piece and drill one end using 5/32" bit to the full depth of the bit. Remember to clean the bit



- 9) Repeat this step after turning the piece end for end and replace the 5/32" bit With a 13/64" bit and drill through the piece ~~entirely~~ *COMPLETING THE HOLE*



- 10) Layout and set up for a 2° taper according to the sketch provided.

