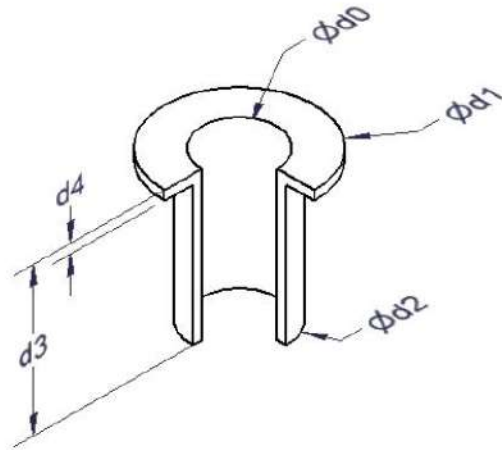


Name: _____

3. Use the illustration below to answer the following parametric equation questions.

[4 POINTS – 1 point each]

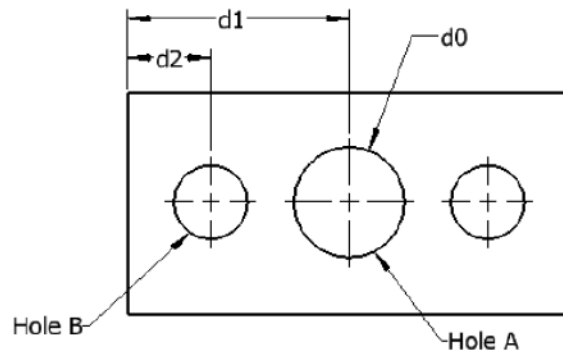
- 3.1 What is the parametric equation for dimension **d1**, if d1 needs to be twice the size of the ID (inside diameter) of the bushing?
- 3.2 What is the parametric equation for dimension **d4**, if d4 must always be .0625"?
- 3.3 What is the parametric equation for dimension **d3**, if d3 needs to be 1/2" larger than d0?
- 3.4 What is the parametric equation for dimension **d2**, if d2 must be 1/8" larger than d0?



ANSWERS: 3.1 $d1 = d0 * 2$
 3.2 $d4 = .0625$
 3.3 $d3 = d0 + 1/2$
 3.4 $d2 = d0 + 1/8$

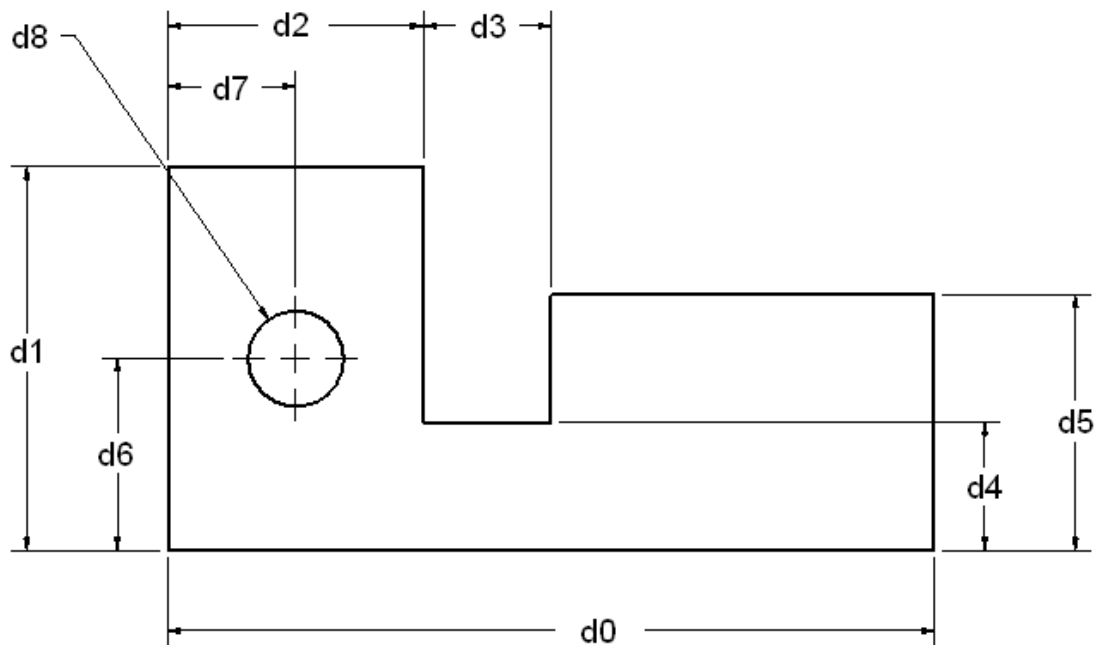
3. Using the dimension parameters shown on the drawing below, write the equation for d2 so that Hole B is always centered between the left edge of the block and the edge of Hole A. Note: d0 is a diameter.

[5-POINTS]



Equation: _____

ANSWER: $d2 = (d1 - (1/2 * d0)) / 2$



1.1 What is the parametric equation for dimension **d1** if the height is always to be 1/2 the overall width of the plate?

1.2 What is the parametric equation for dimension **d2** if the width is always to be 1/3 the overall width of the plate?

1.3 What is the parametric equation for **d8** if the hole diameter is always to be 1/2 of the vertical distance from the bottom of the left side of the plate to the center of the hole?

1.4 What is the parametric equation for **d4** if the height is always to be a .25 inch larger than the diameter of the hole?

1.5 What is the parametric equation for **d3** if the width is always to be equal to the height from the bottom of the plate to the bottom of the cut out?

ANSWER:

1.1 $d1 = 1/2 \ d0$

1.2 $d2 = 1/3 \ d0$

1.3 $d8 = d6$

1.4 $d4 = d8 + .25$

1.5 $d3 = d4$