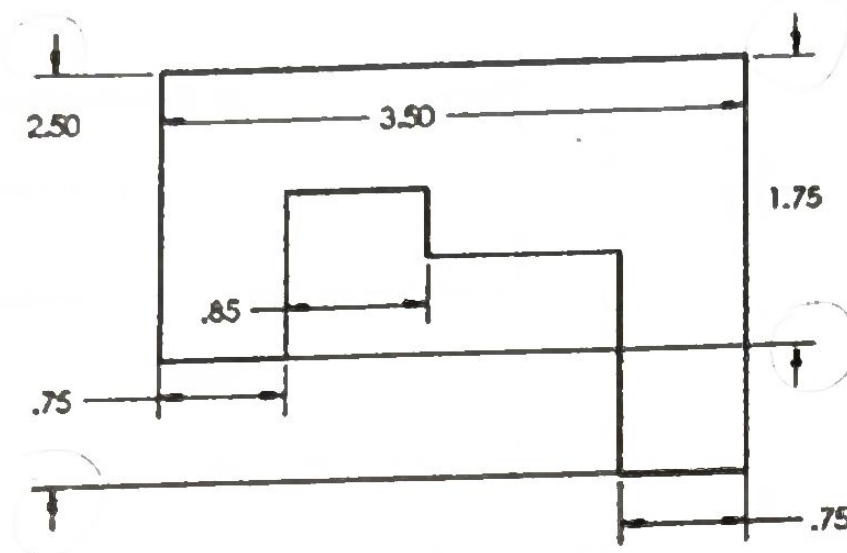


Assignment – Chapter 3: Dimensioning

Dimension Exercises:

Exercise 1:

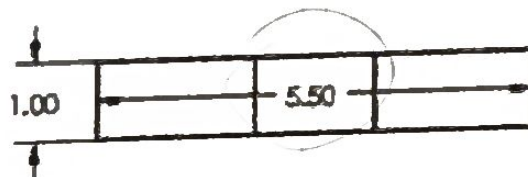
Identify the dimension errors in the below illustration. Circle and list the errors.



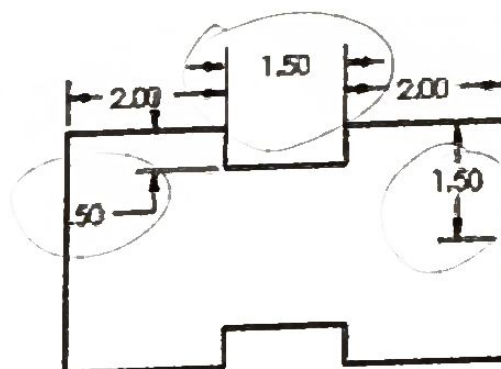
Errors: Wrong arrow placement

Exercise 2:

Identify the dimension errors in the below illustration. Circle and list the errors.



Should be outside of the image



Should be outside

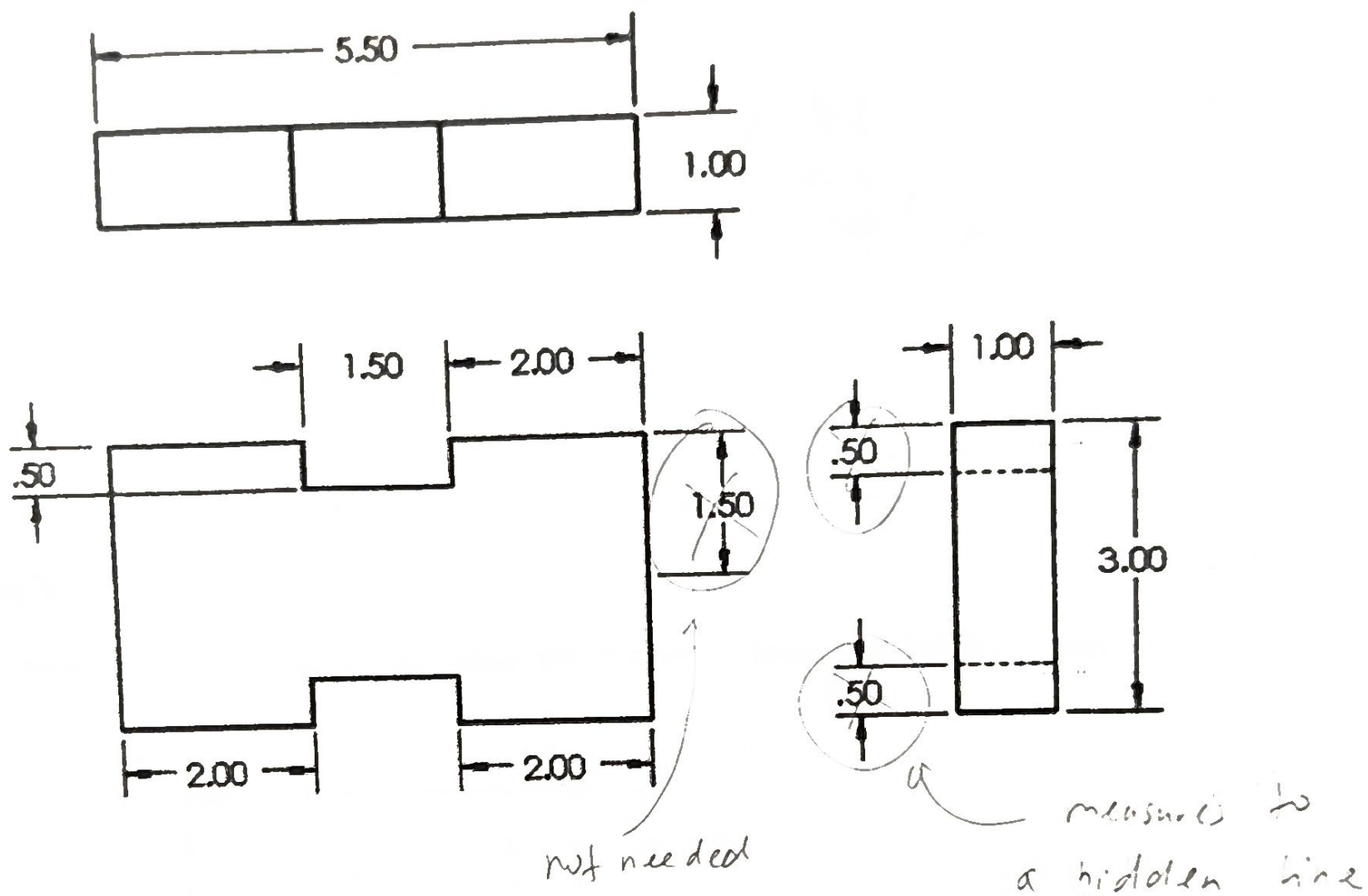
should be outside, makes it unclear to understand

measuring to a non-existing feature

Errors: _____

Exercise 3:

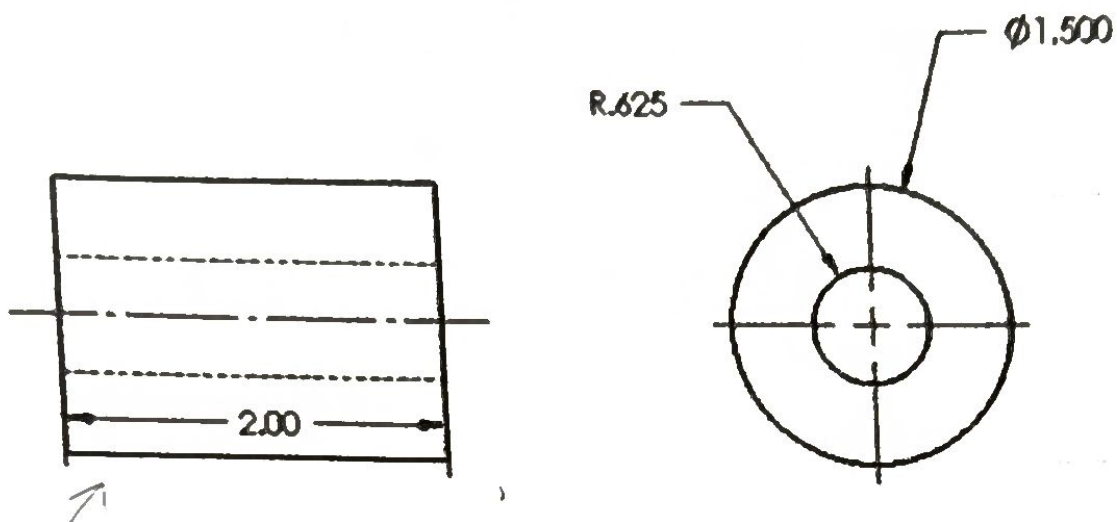
Identify the duplicate dimensions and cross out the ones that you feel should be omitted. Explain why. Are there any dimensioning mistakes in this drawing? Explain.



Explain:

Exercise 4

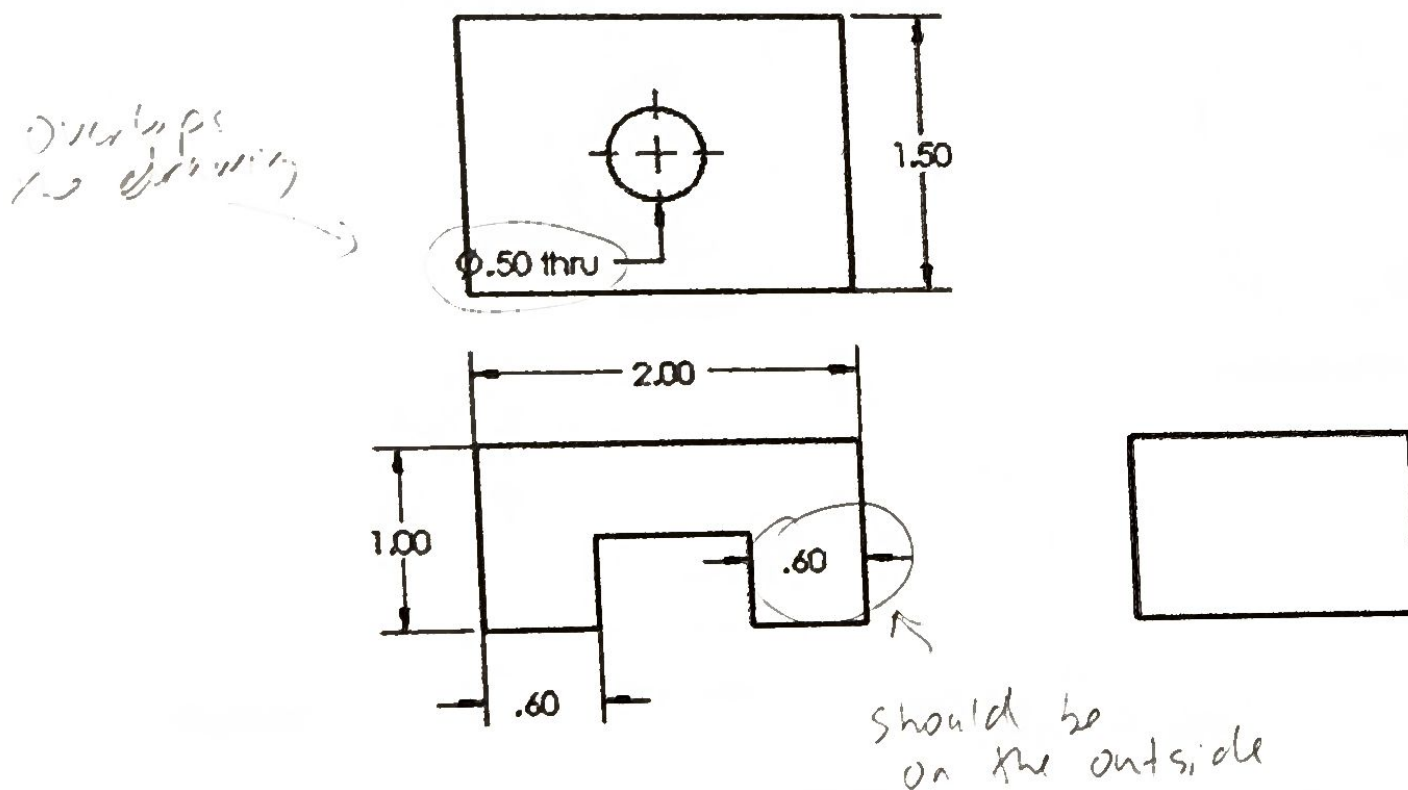
Identify the dimension errors in the below illustration. Circle and list the errors.



Errors: This view could be omitted since this is a simple cylinder depth can be identified

Exercise 5

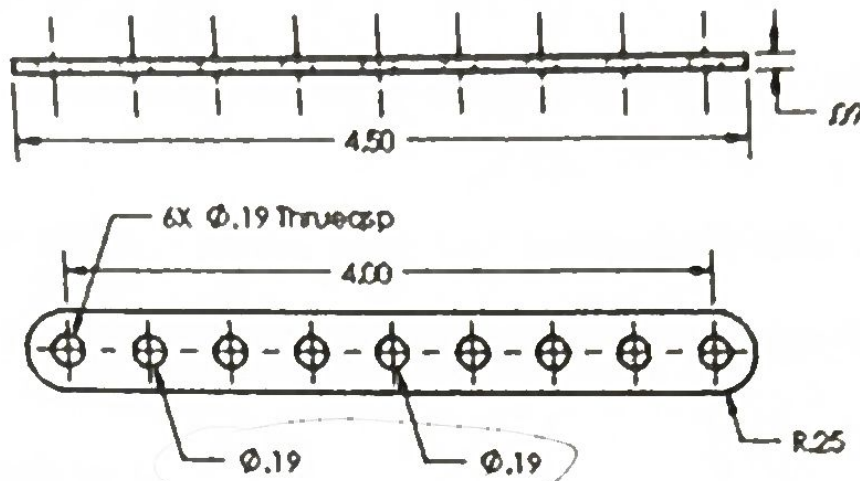
Identify the dimension errors in the below illustration. Circle and list the errors.



Errors: should be on the outside

Exercise 6

Identify the dimension errors in the below illustration. Circle and list the errors.

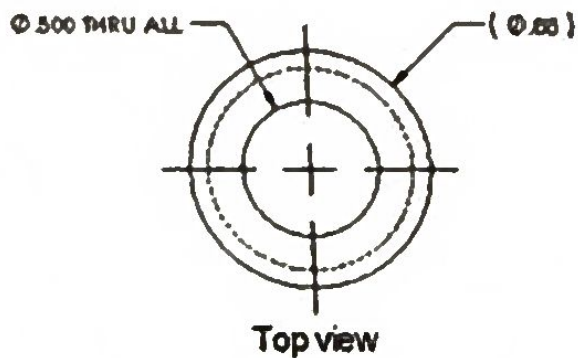


Explain:

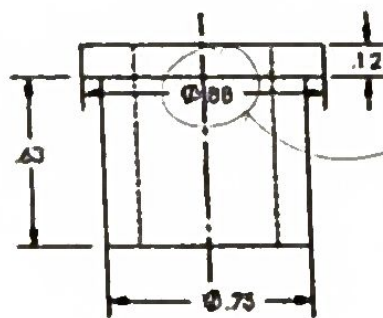
could be changed to x8 instead of x6

Exercise 7

Identify the dimension errors in the below illustration. Circle and list the errors.



Top view



Front view

inside drawing



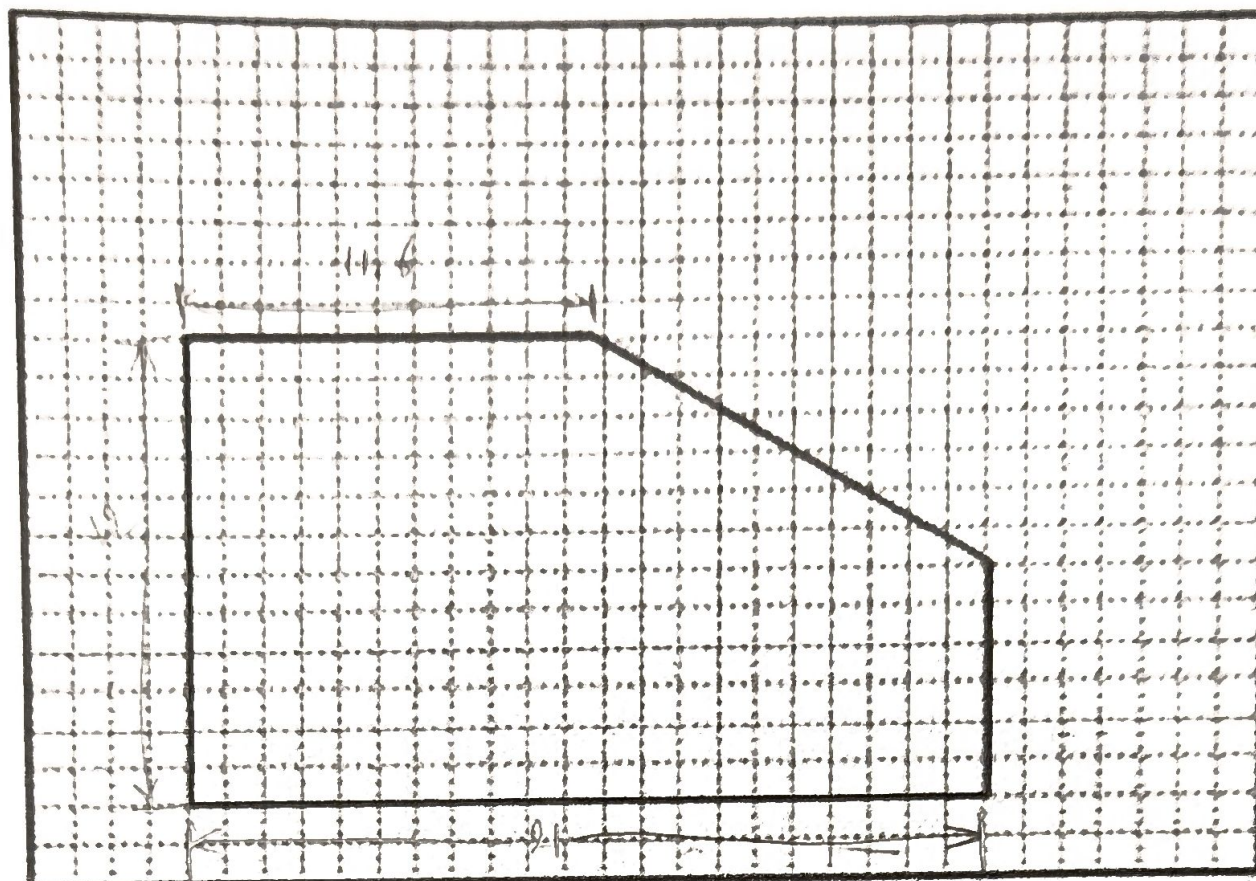
Isometric view

Explain:

Questions

1. True or False: Dimensions should not be duplicated or the same information given in two different ways. If a reference dimension is used, the size value is placed within parentheses (X). True
2. The U.S. unit system is also known as the (IPS) unit system. What does IPS stand for? Inches, Pounds, Seconds
3. The diameter of a hole is placed in the view in which the hole is shown as a circle.
4. The length and diameter of cylinder are usually placed in the view which shows the cylinder as a rectangle.
5. Dimension a hole by its Radius.
6. True or False: Dimensioning to hidden lines should be avoided wherever possible. True

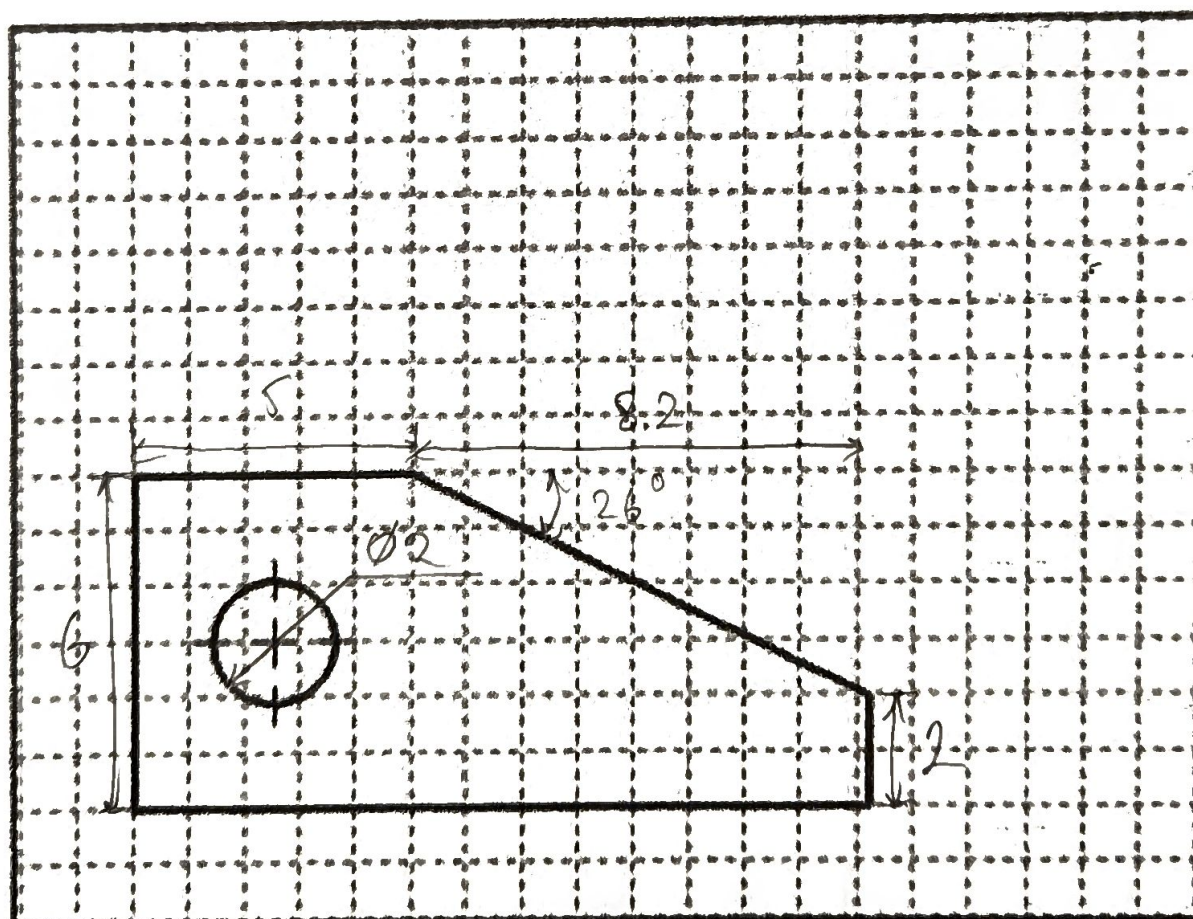
Exercise 3.1: Estimate the dimensions in a whole number. Dimension the below illustration. Note: There is more than one way to dimension an angle.



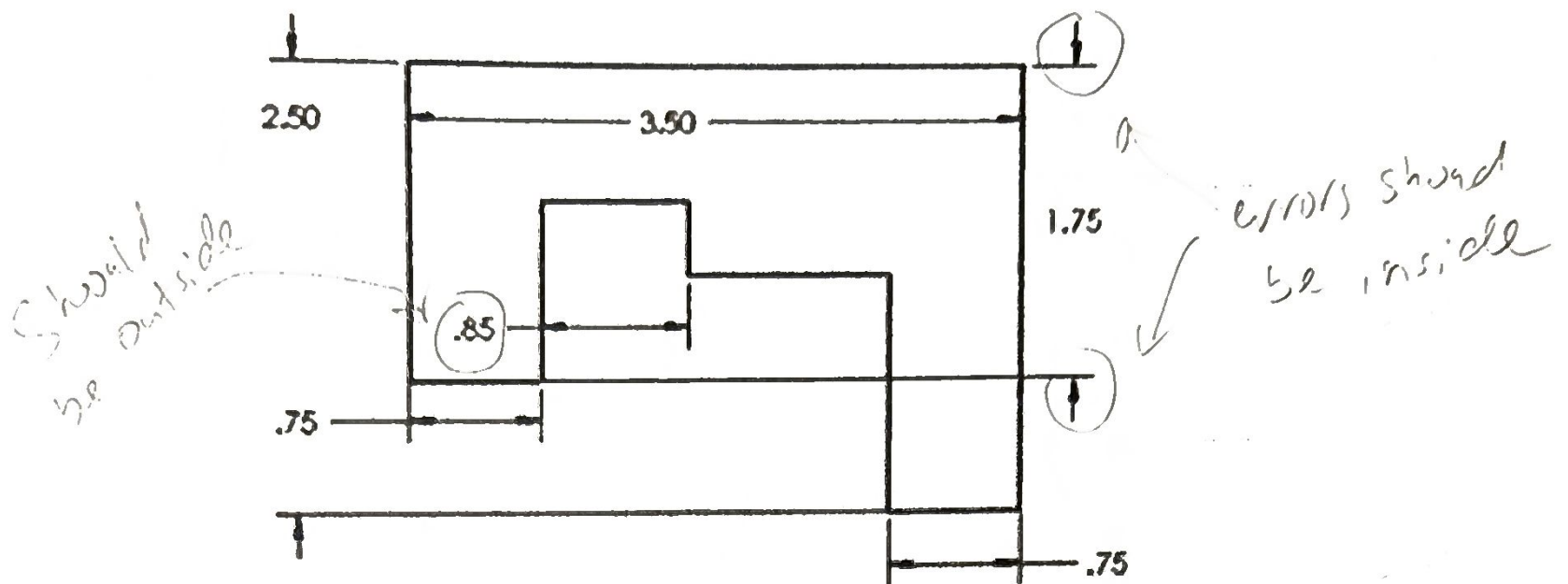
Exercise 3.2:

Estimate the dimensions in a whole number. Dimension the illustration.

Note: There is more than one way to dimension an angle.

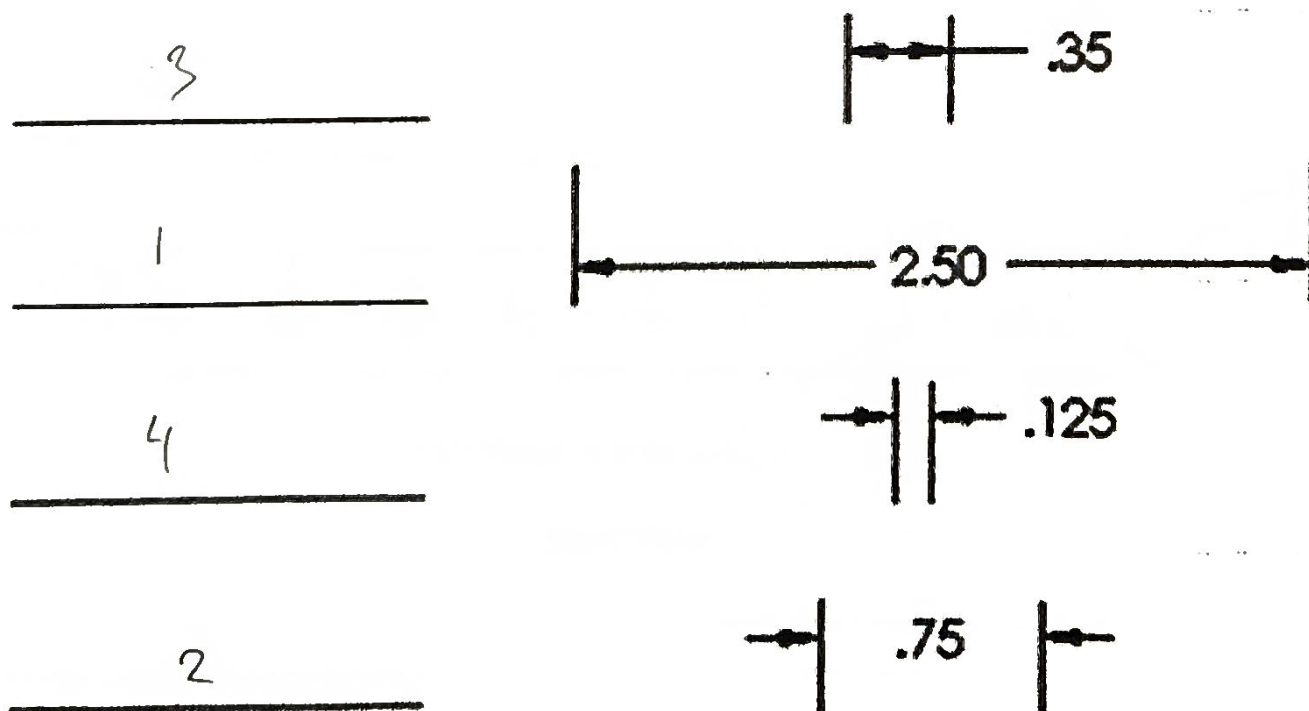


Exercise 3.3: Identify the dimension errors in the below illustration. Circle and list the errors.

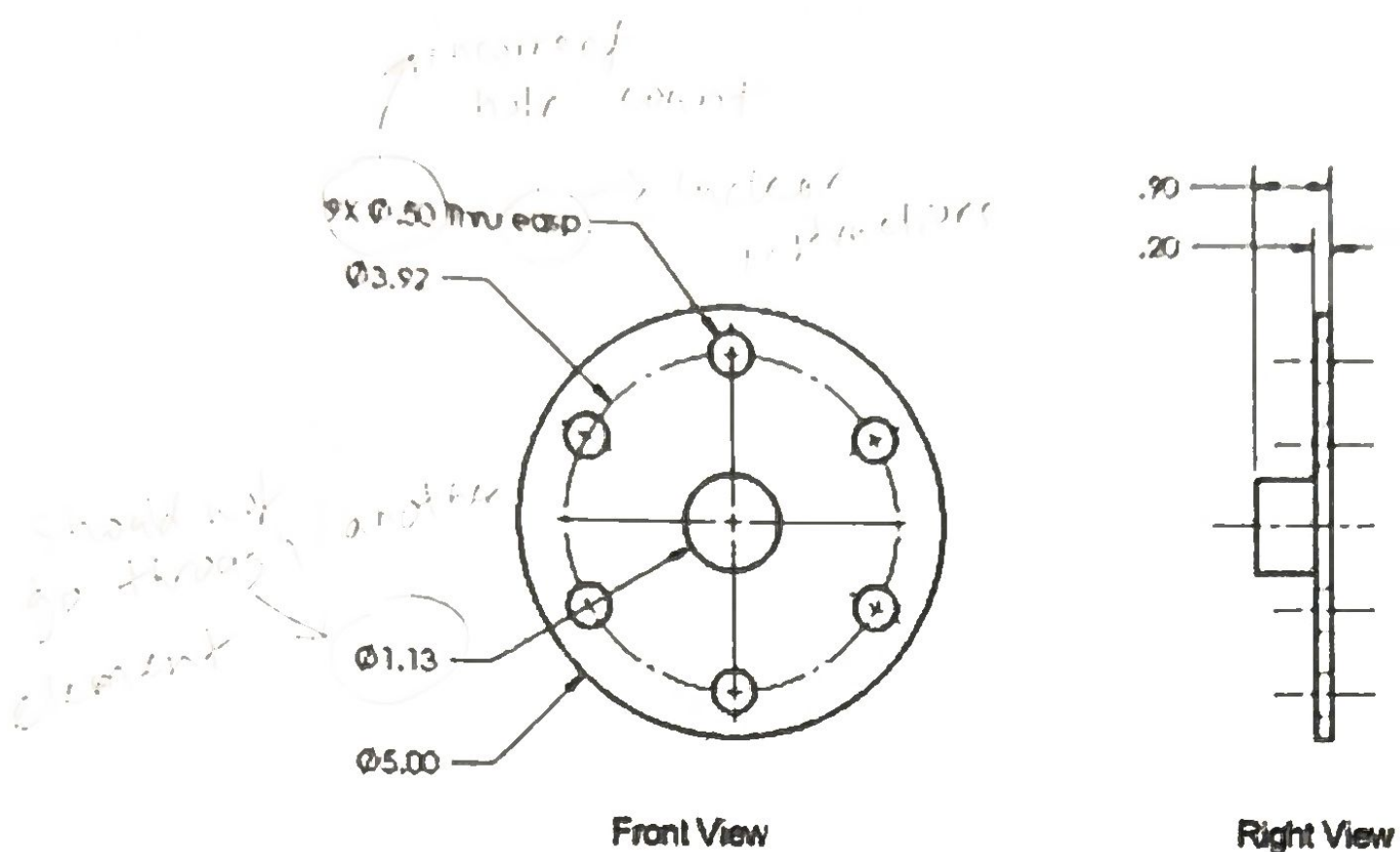


Errors: _____

Exercise 3.4: Arrowheads are drawn between extension lines if space is available. If space is limited, what is the preferred Arrowhead and dimension location order? List the preferred order.

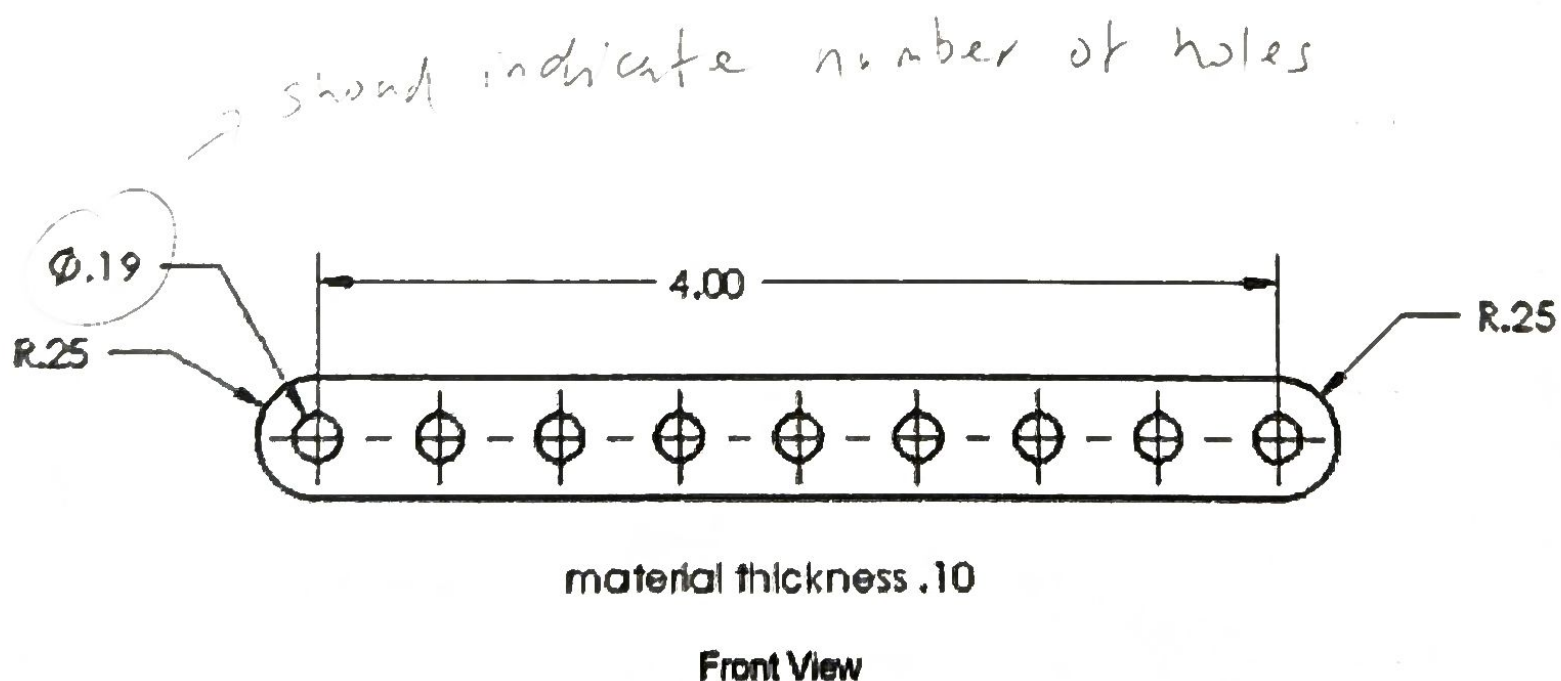


Exercise 3.5: Identify the dimension errors in the below illustration. Circle and list the errors.



Errors: _____

Exercise 3.6: Identify the dimension errors in the below illustration. Circle and list the errors.



Errors: _____