

DOCUMENT RESUME

ED 127 433

CE 007 572

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 TITLE Improving Measuring Skills. Industrial Arts Series No. 10,004.
 INSTITUTION Mississippi Research and Curriculum Unit for Vocational and Technical Education, State College.
 SPONS AGENCY Mississippi State Dept. of Education, Jackson. Div. of Vocational and Technical Education.
 PUB DATE 75
 NOTE 71p.

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.
 DESCRIPTORS *Drafting; *Industrial Arts; Instructional Aids; Measurement; Measurement Instruments; *Measurement Techniques; Secondary Education; *Skill Development; Vocational Education
 IDENTIFIERS Rulers (Instruments)

ABSTRACT

Each of the five units in this instructional packet contains instructions for showing students how to "read" the ruler and measure, exercises to give the student the required practice needed to become skillful at this task, and tests to determine achievement. The five units cover inch, half-inch, fourth-inch, eighth-inch and sixteenth-inch measurements. A diagnostic evaluation test is provided for identifying those students who cannot measure correctly as well as each student's particular measuring problem. The material is presented in the form of 1-page instruction sheets, 1-page exercises and 1-page tests designed to be traced onto ditto or mimeograph stencils. The "How To" instructions are intended for use in making transparencies to be used when explaining and showing students how to measure or for use as student pass-out material.
 (HD)

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IMPROVING MEASURING SKILLS

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Sponsored by the

Division of Vocational and Technical
Education
Mississippi State Department of
Education
Jackson, Mississippi

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Published by the

Mississippi State University
Research and Curriculum Unit
for
Vocational and Technical Education
Mississippi State, Mississippi

Industrial Arts Series
Publication Number 10.004

1975

CE 007 572

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Research and Curriculum Unit for
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Mississippi State, Mississippi 39762

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AUTHENTICATION COMMITTEE

The material in this publication was reviewed and endorsed as being appropriate and beneficial for inclusion in the industrial arts curriculum by an authentication committee. Deep appreciation is extended to the members for their time and valuable suggestions.

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Appreciation is extended to Mrs. Donna Breckenridge for the cover design.

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NOTE TO TEACHERS

Learning to measure with a ruler is a two-step procedure. First the student must be shown the "How To" of measuring. Then, secondly, the student must practice until he becomes skillful at measuring.

This packet contains a diagnostic evaluation for determining student measuring ability, instructions for showing students how to "read" the ruler and measure, exercises to give the students the required practice needed to become skillful at this task, and tests to determine achievement.

The material purposely was not bound in booklet form. It was prepared to be easily traced onto ditto or mimeograph stencils for reproducing the number you will need for your classes. Don't throw your stencils away after they are used. Save them in a folder so you can have additional copies made when your supply is depleted.

The "How To" instructions can be used to make transparencies which can be valuable aids when explaining and showing students how to measure, or they can be used as student pass-out material.

Holes have been punched in the packet. You may want to place the material in a loose-leaf binder to keep it in order.

USING THE MATERIAL

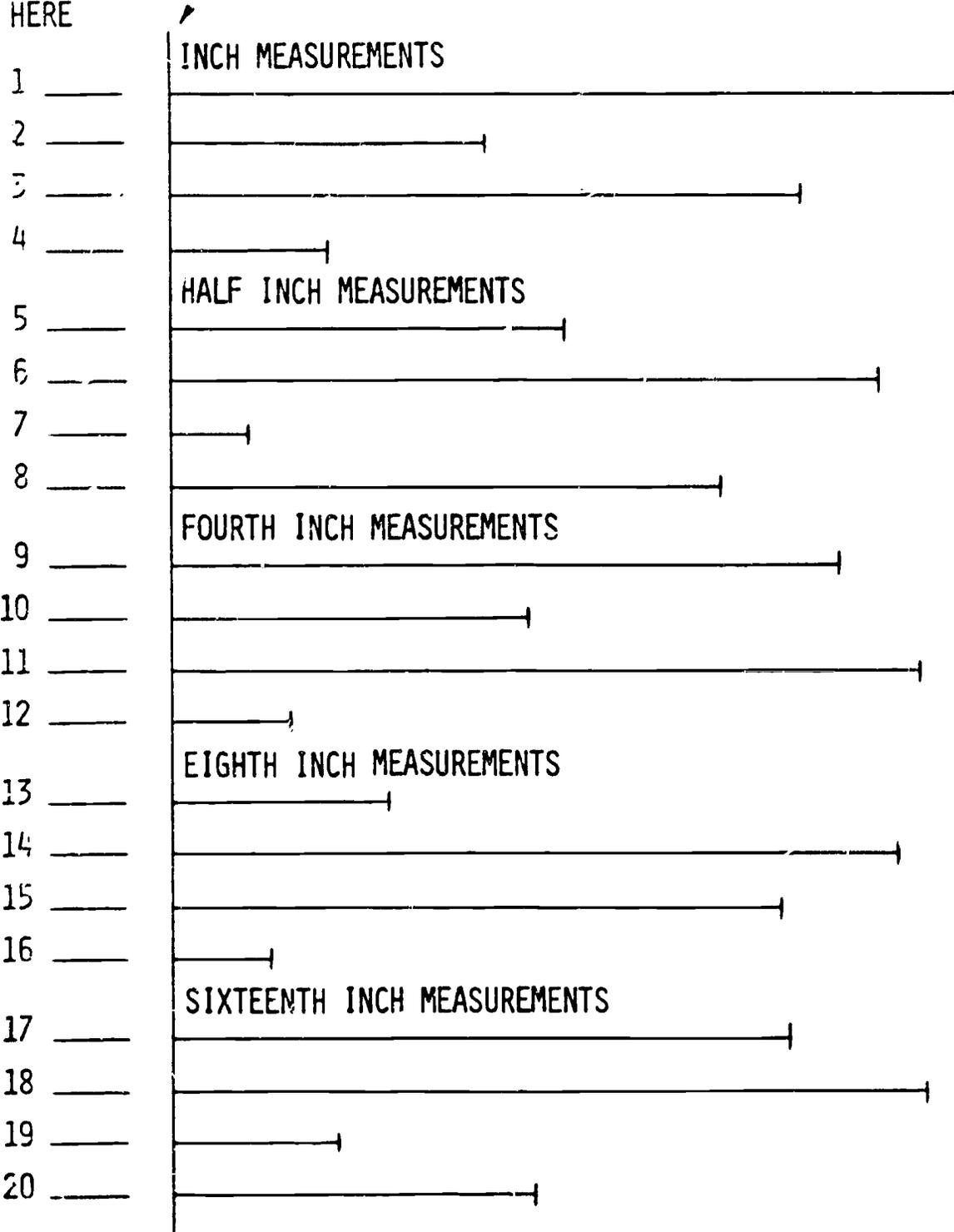
Performance is the best test to determine student measuring ability. Administer the diagnostic evaluation, Test No. 1, to the entire class. The test results will indicate which students cannot measure correctly and will also identify each student's particular measuring problem. Students can then be grouped according to their performance levels.

Working with these small groups, show them how to measure, using the transparency as an aid and starting at the level of difficulty identified by the test. After they have been shown how to measure, the students should begin doing the exercises for that particular type of measurement. The students should do as many exercises as needed to become skillful with a certain measurement—no particular number should be required. A test for each type of measurement is included and can be taken by the student when he feels ready for it. If his score is not good, he should do more exercises, followed by a second test. A good score would, of course, indicate he is ready to progress to the next level of difficulty in measuring. Repeat this same process at the next level.

MEASURE LINES AND MARK ANSWERS

MARK
ANSWERS
HERE

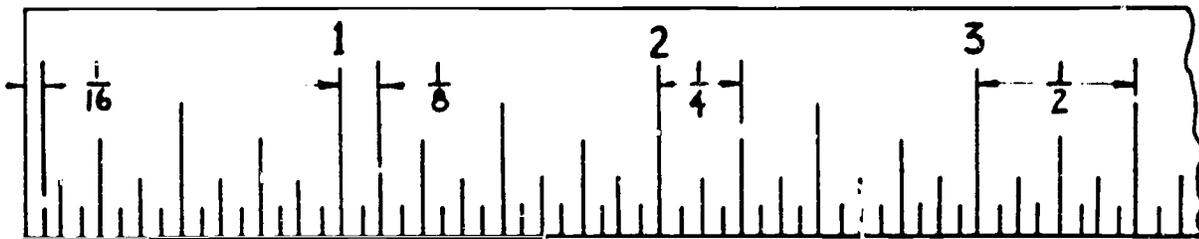
— BEGIN MEASURING AT LINE



UNDERSTANDING THE RULER

Rulers come in different lengths. Some are one foot long, some three feet long, some eight feet long (folding rules), and some are as long as 100 feet (called tapes). Regardless of the length of the ruler, they are divided the same way.

Most rulers are divided into sixteenths of an inch.



The longest lines on the ruler are the inch marks, and they are numbered.

The half inch lines are the next longest, followed by the fourths, eighths, and then the sixteenths which are the shortest lines.

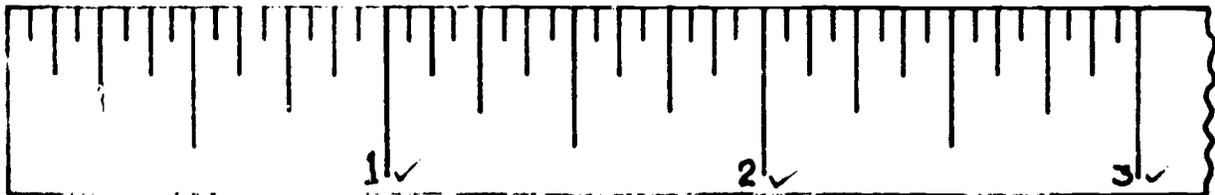
The distance between any two consecutive lines on the ruler is $\frac{1}{16}$ of an inch.

UNDERSTANDING INCH MEASUREMENTS

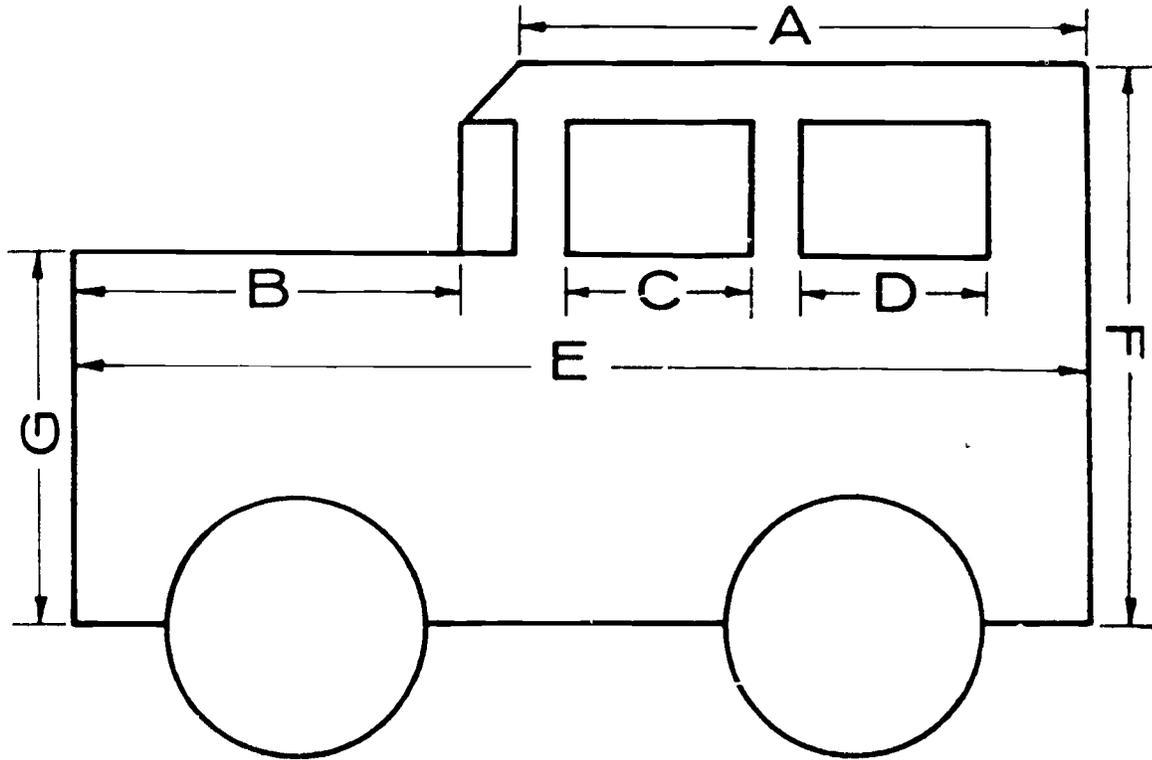
On all one-foot rulers, yard sticks, folding rulers, and tapes the inch marks are identified by numbers. The distance from the end of the ruler to any number on the ruler is the length in inches.

To measure two inches, for example, begin at the end of the ruler and locate the number 2. That distance, from end to number 2, is two inches.

The inch marks on a ruler are checked below.



INCH MEASUREMENT
EXERCISE NO. 1



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

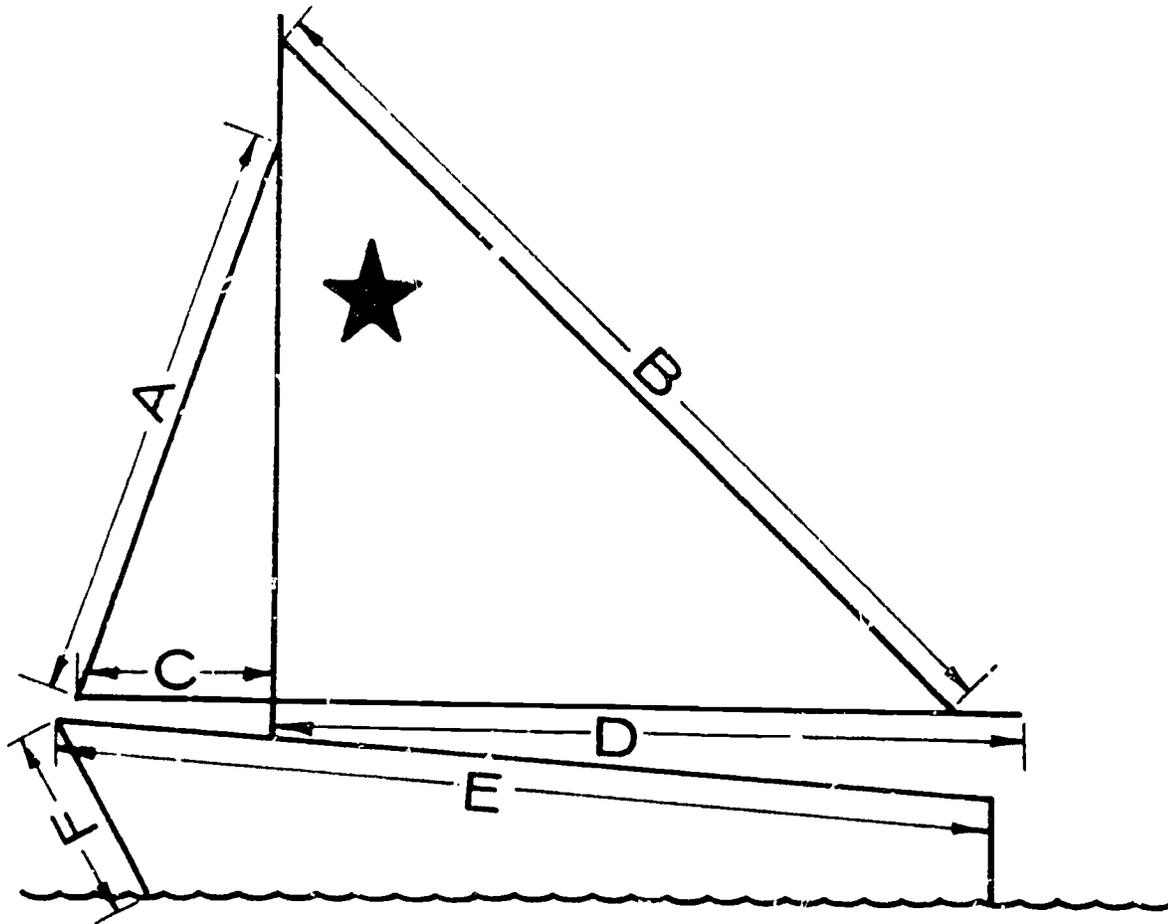
LINE G IS ?

LINE C IS ?

LINE D IS ?

LINE E IS ?

INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

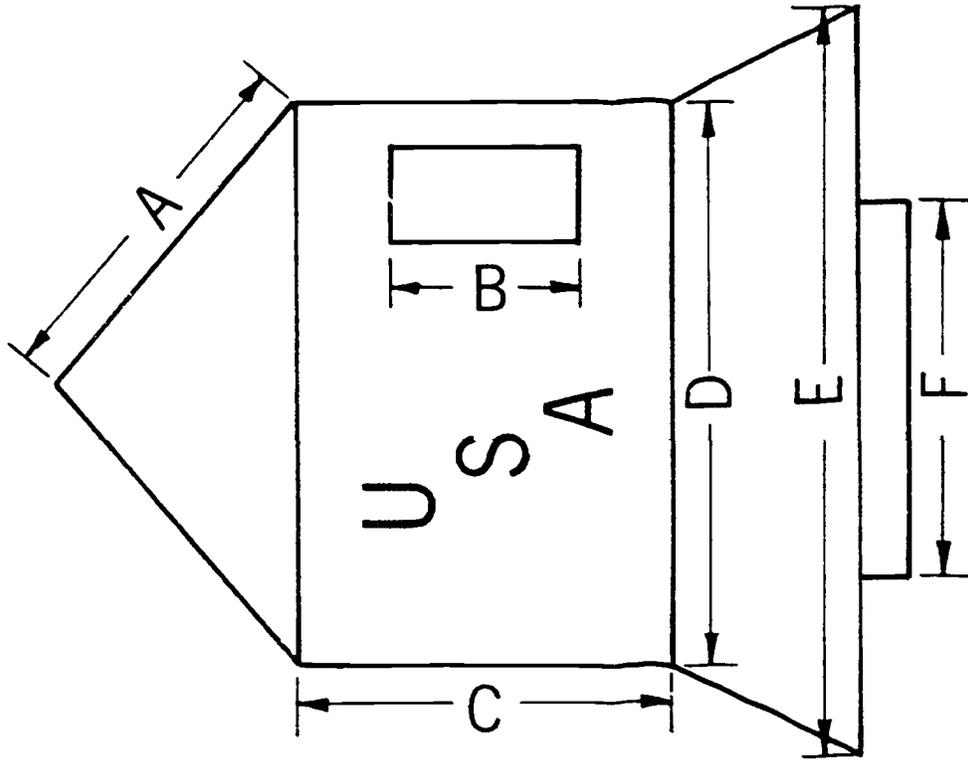
LINE B IS _____ ?

LINE C IS _____ ?

LINE D IS _____ ?

LINE E IS _____ ?

INCH MEASUREMENT
EXERCISE NO. 3



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

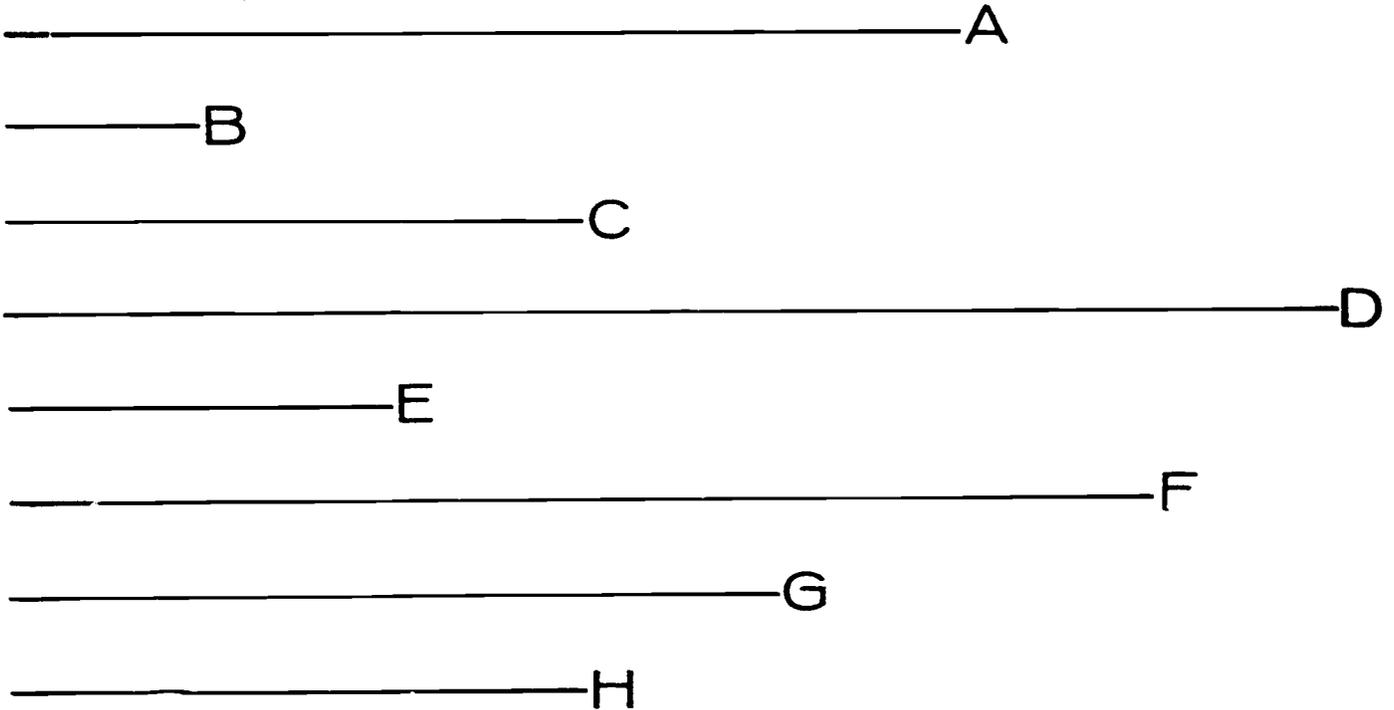
LINE B IS _____?

LINE C IS _____?

LINE D IS _____?

LINE E IS _____?

INCH MEASUREMENT
EXERCISE NO. 4



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

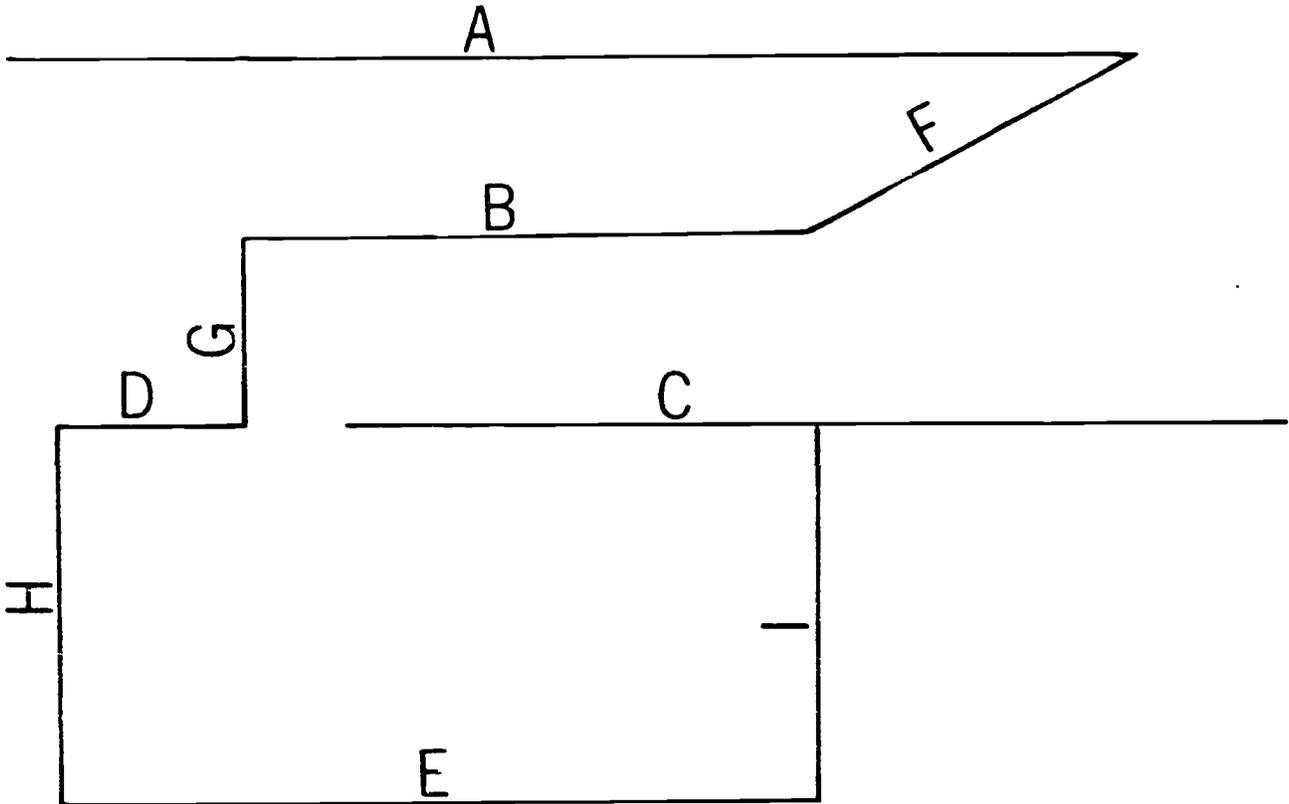
LINE C IS _____ ?

LINE H IS _____ ?

LINE D IS _____ ?

LINE E IS _____ ?

INCH MEASUREMENT
EXERCISE NO. 5



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

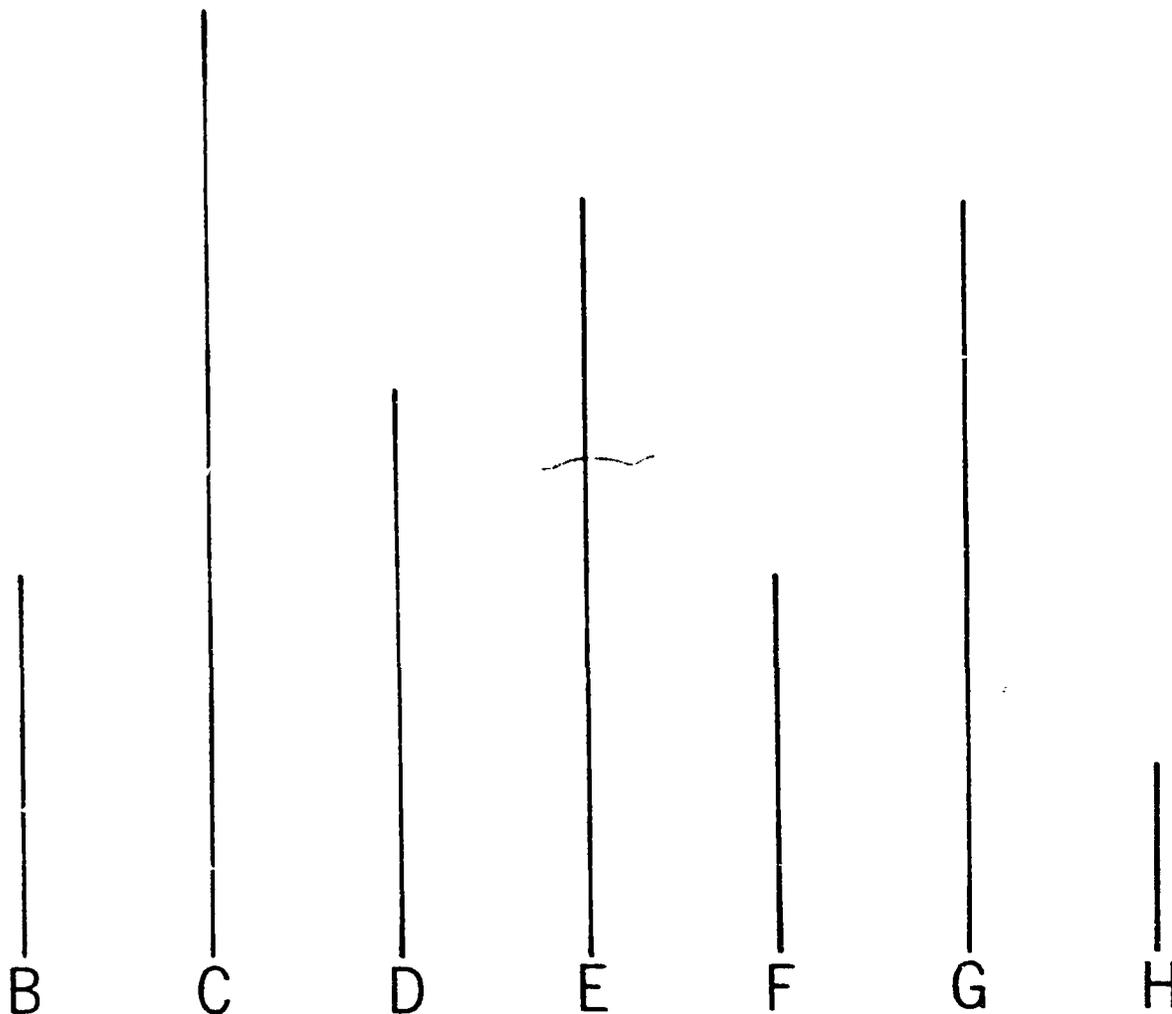
LINE I IS _____?

LINE E IS _____?

15

10

INCH MEASUREMENT
EXERCISE NO. 6



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

LINE H IS _____ ?

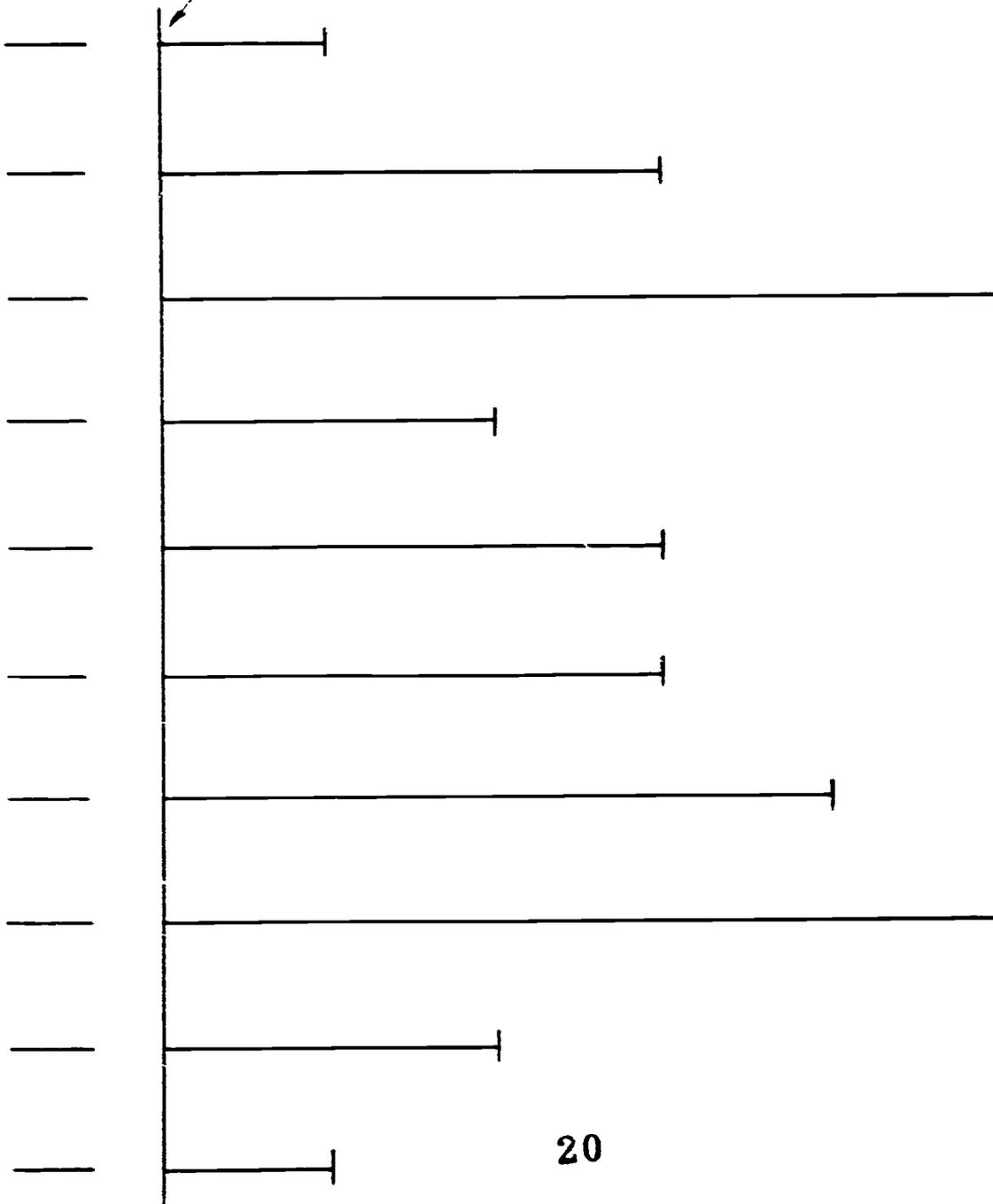
LINE D IS _____ ?

LINE E IS _____ ?

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

BEGIN MEASURING AT LINE

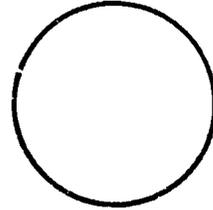


20

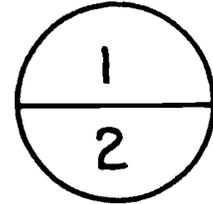
15

UNDERSTANDING HALF INCH MEASUREMENTS

Step 1
Think of a whole pie as being the same as one inch.



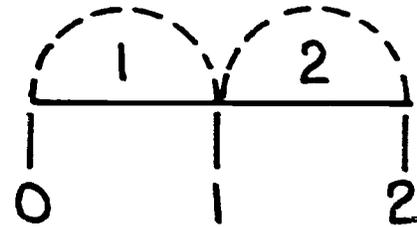
Step 2
Imagine that the pie is sliced into 2 equal parts (called halves).



Step 3
Now picture the 2 slices of the pie arranged into this position. The base line of the pie (which equals one inch) is now divided into halves.



Step 4
Let's make a one-inch ruler from this base line. It will look like this.

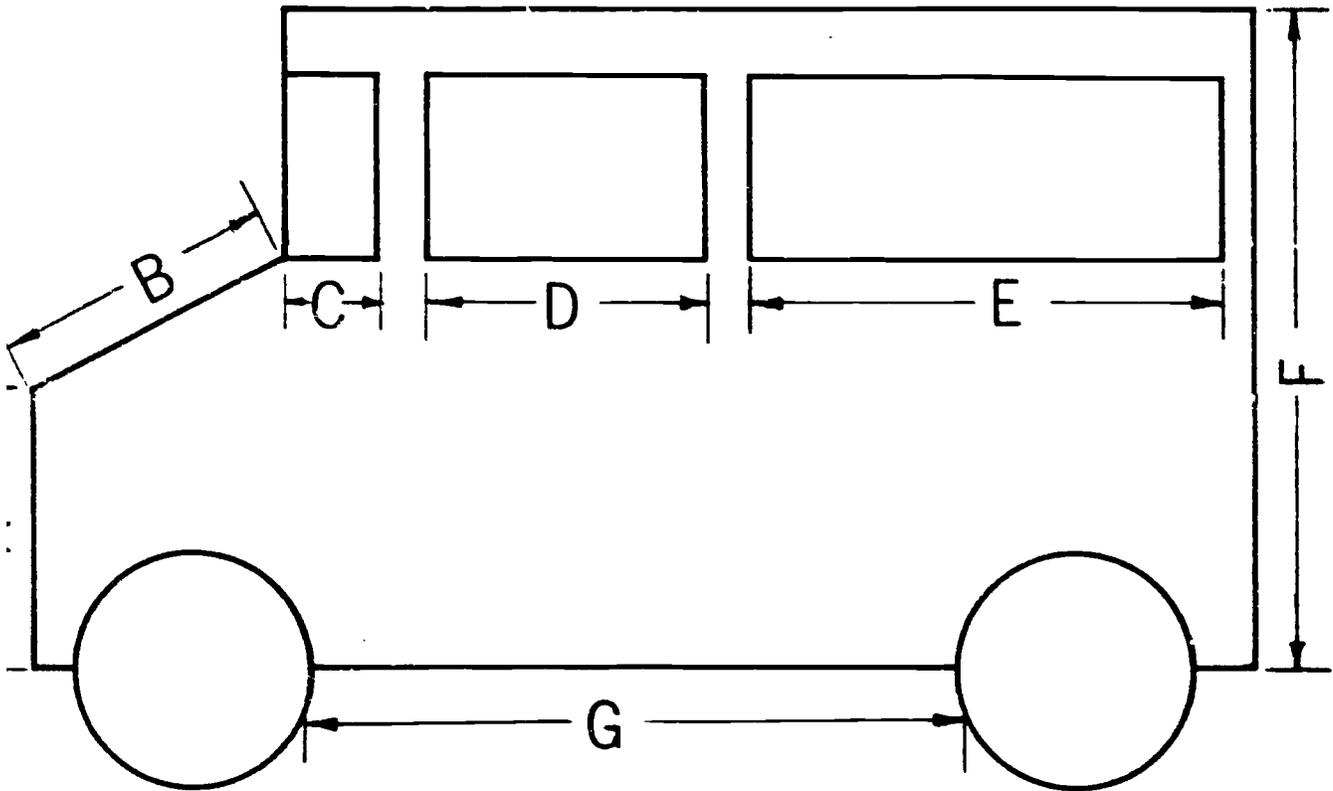


Step 5
When measuring always start at 0 and:
One Part = $\frac{1}{2}$ inch
Two Parts = $\frac{2}{2}$ or 1 inch

Step 6
The half inch marks on a ruler are checked below.



HALF INCH MEASUREMENT
EXERCISE NO. 1



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

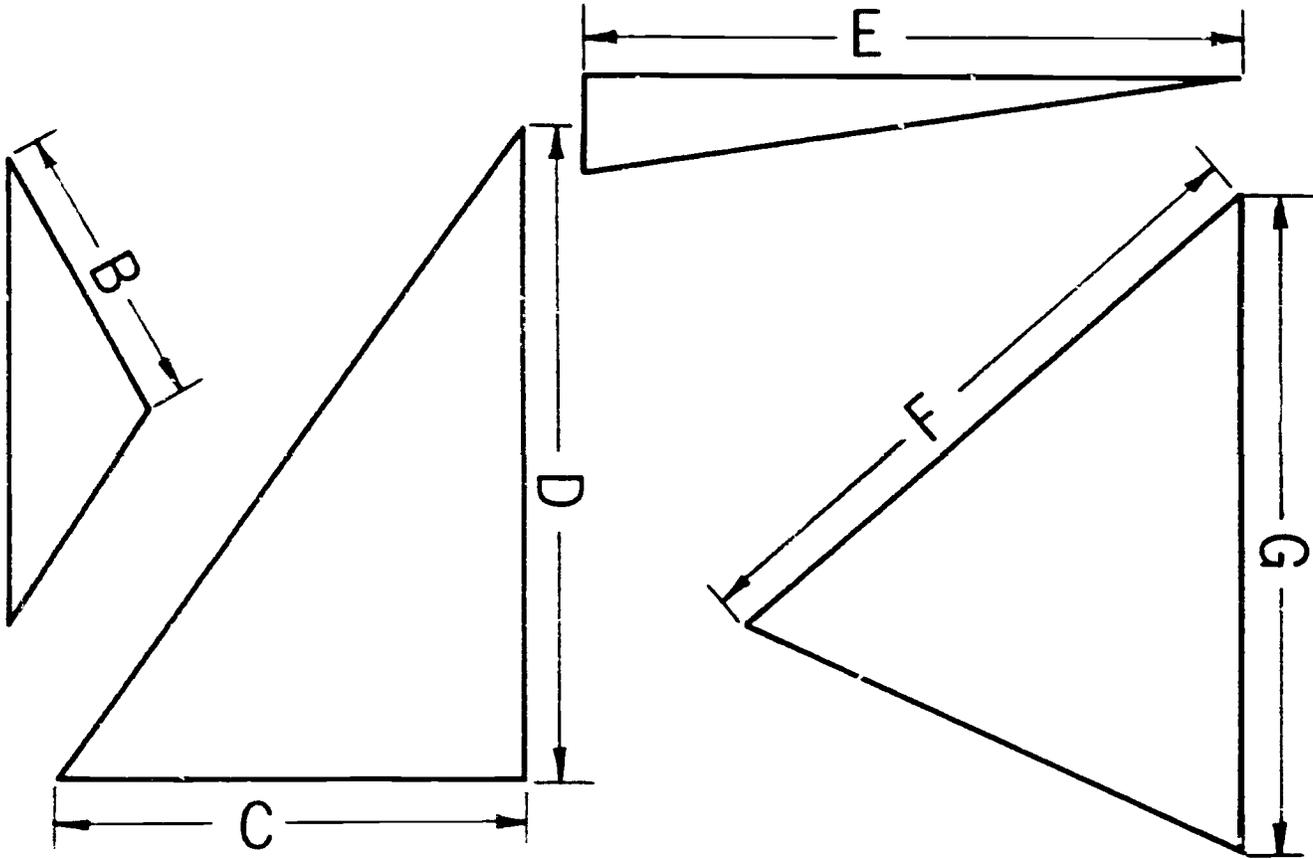
LINE G IS _____?

LINE C IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

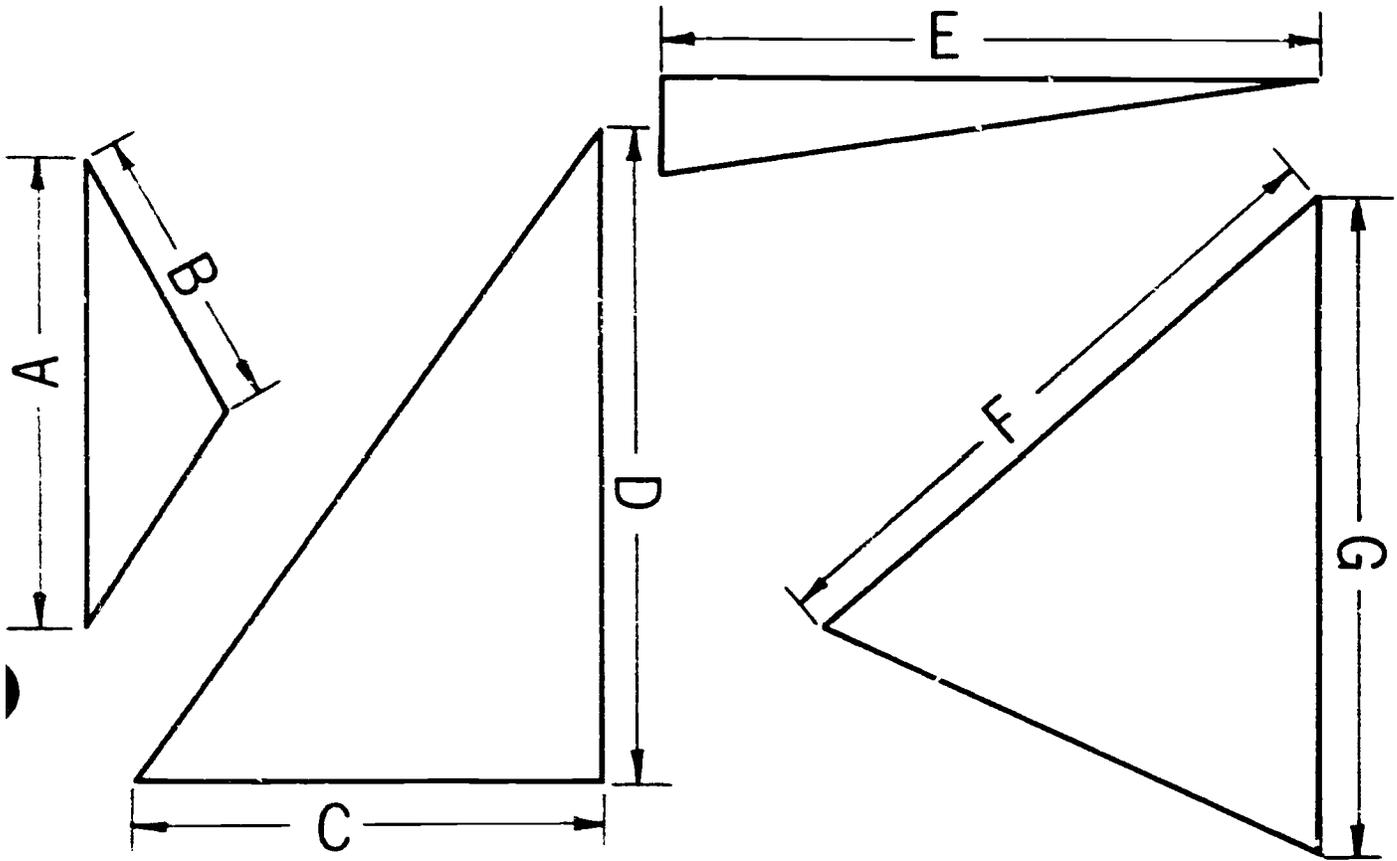
LINE G IS _____?

LINE C IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

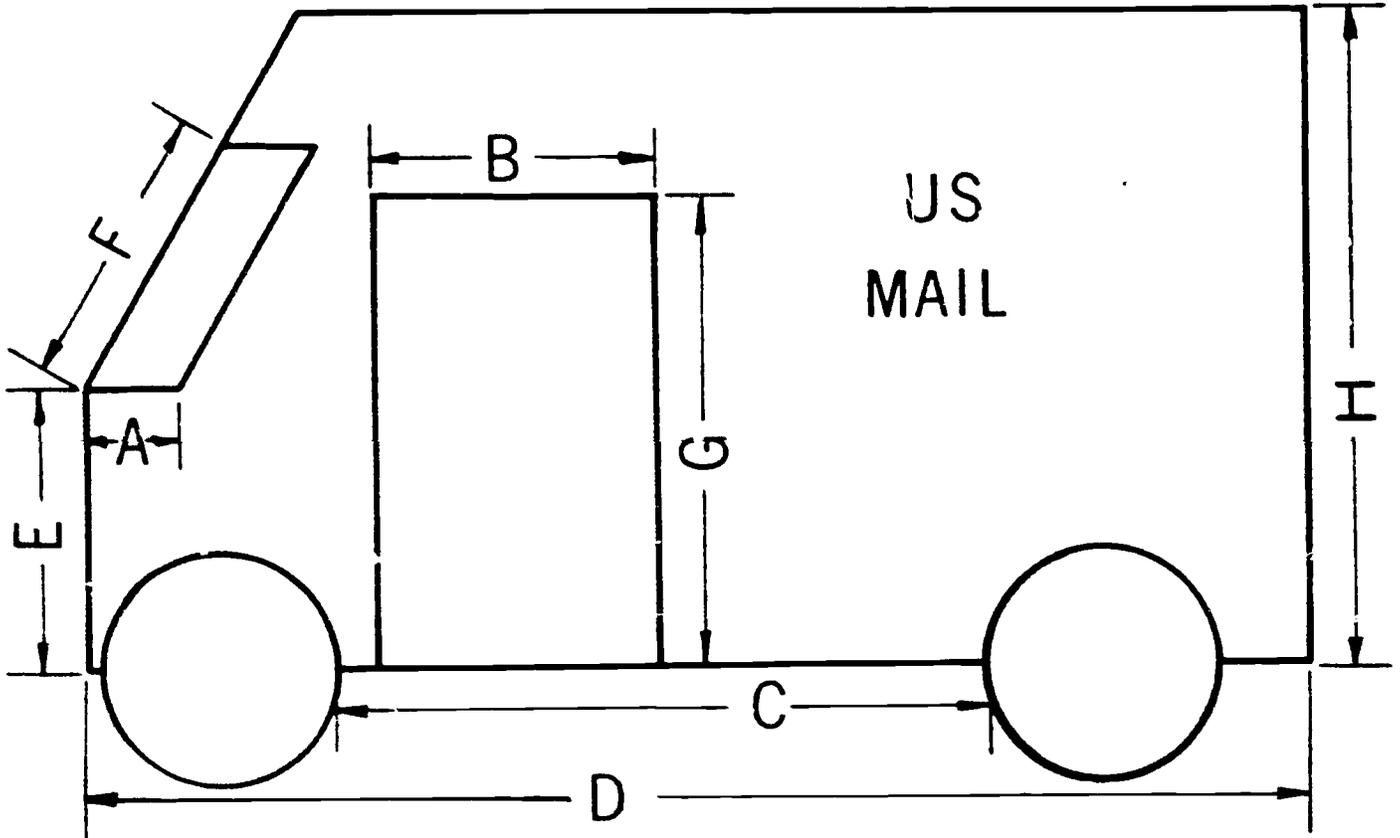
LINE G IS _____?

LINE C IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 3



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

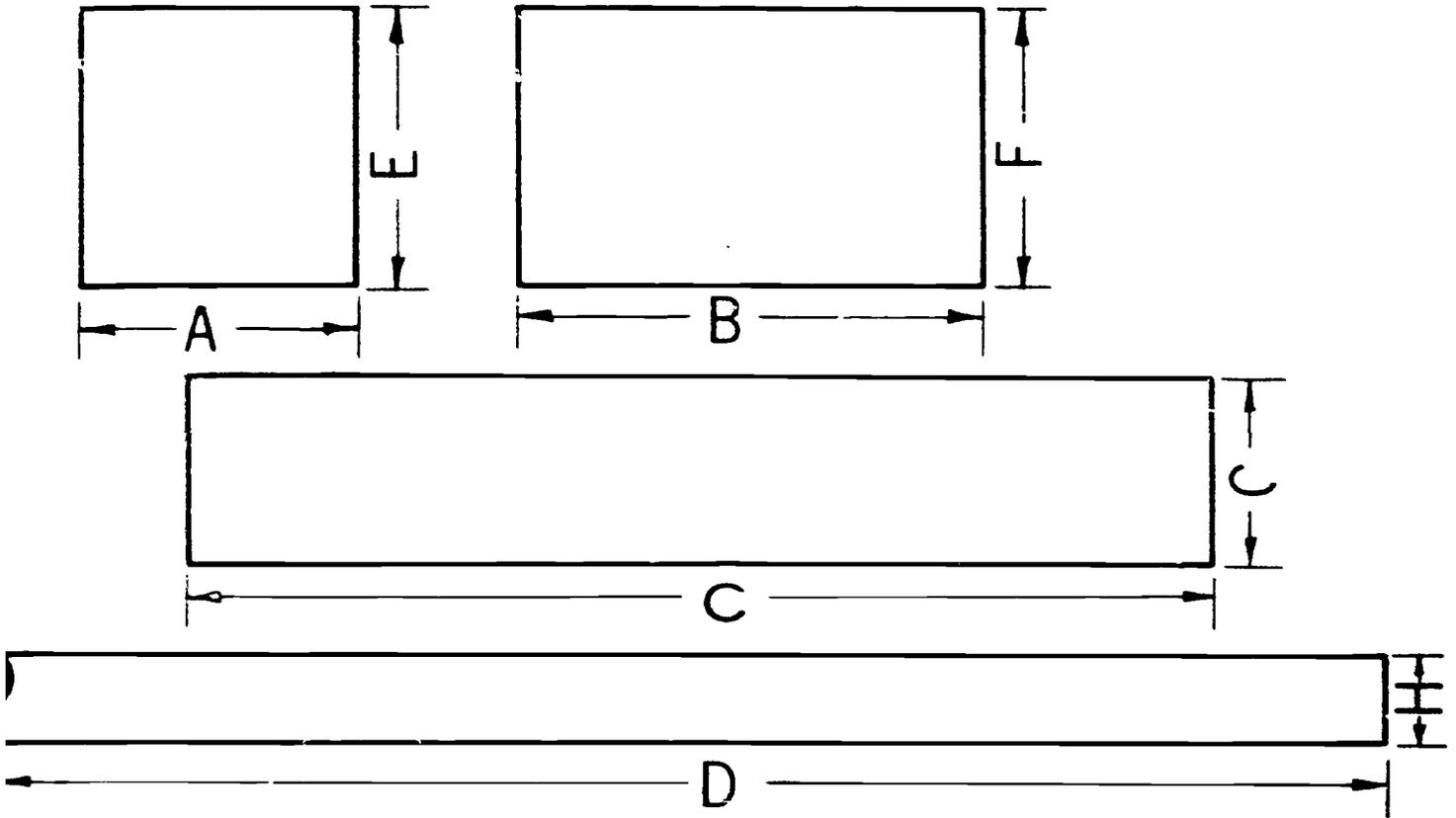
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 4



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

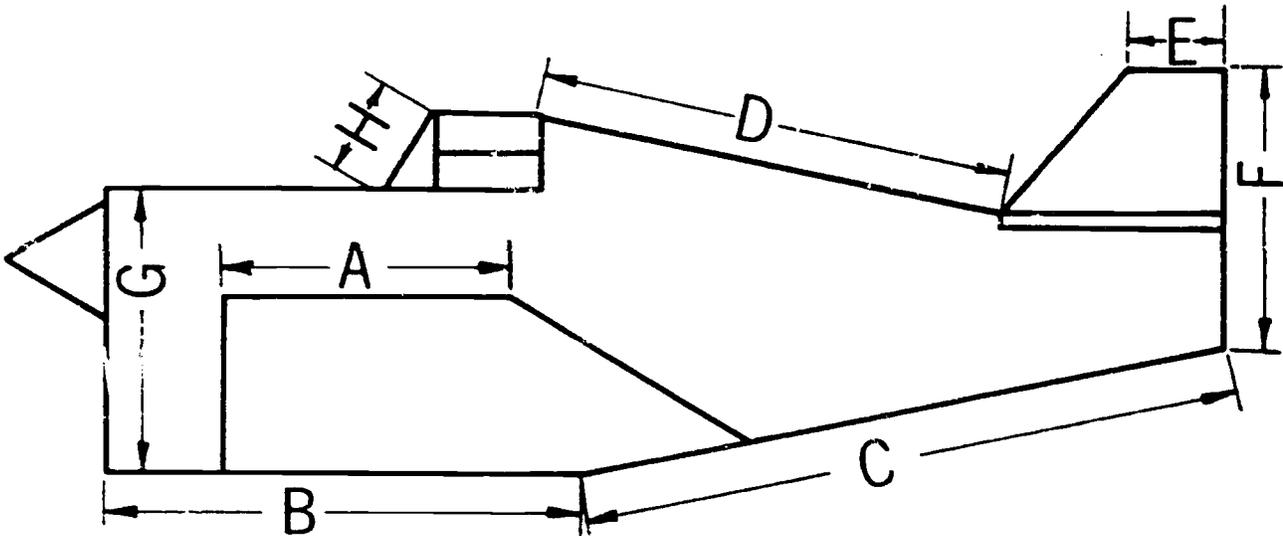
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 5



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

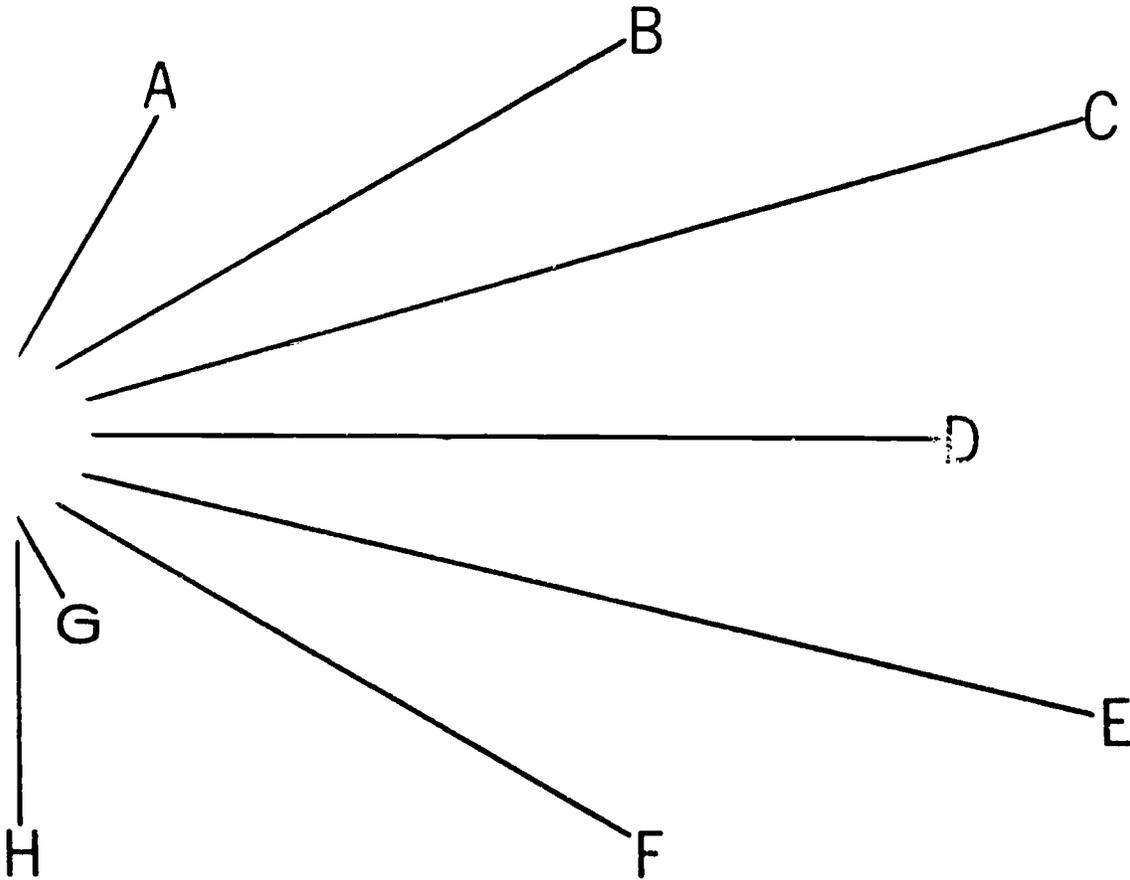
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 6



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

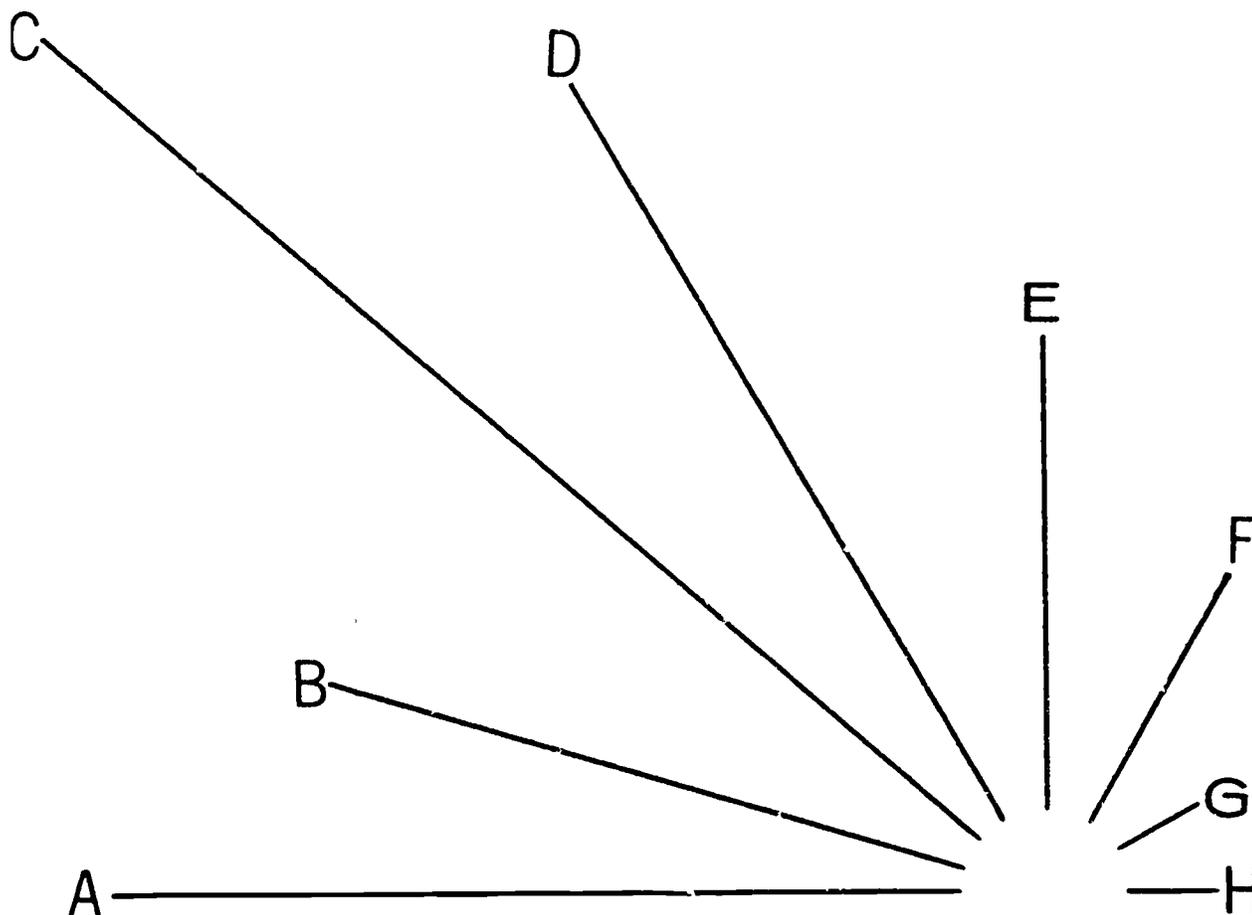
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 7



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

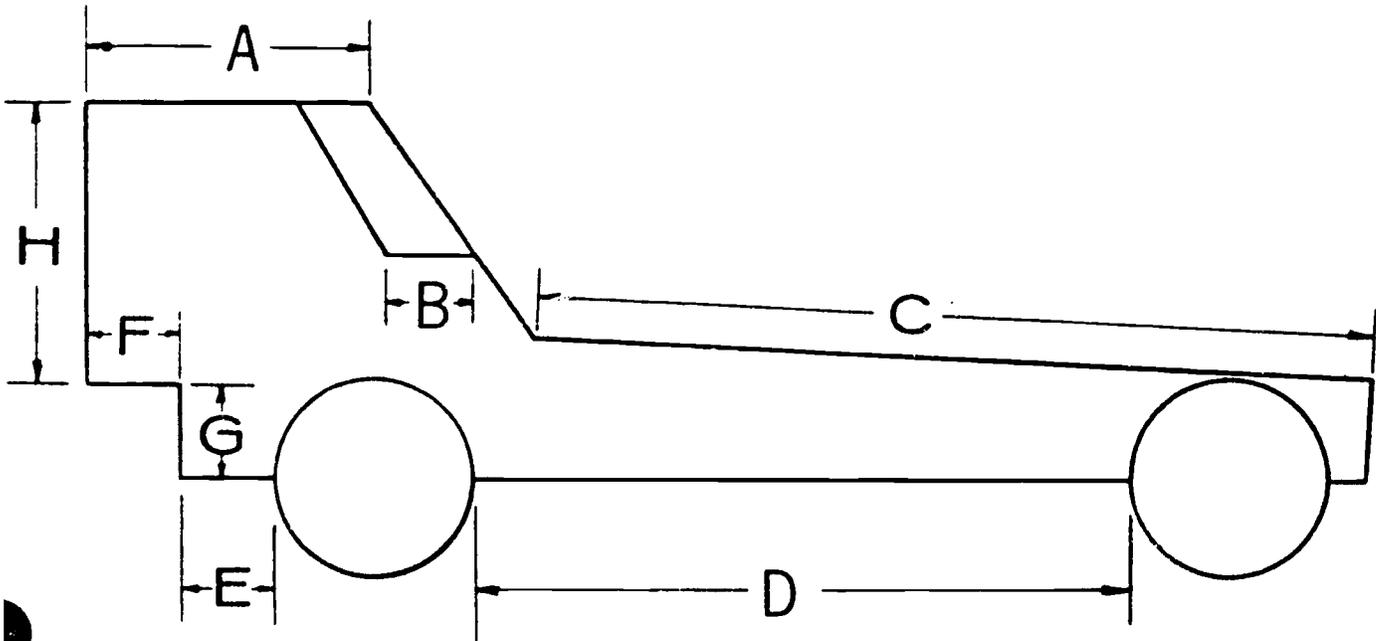
LINE C IS _____ ?

LINE H IS _____ ?

LINE D IS _____ ?

LINE E IS _____ ?

HALF INCH MEASUREMENT
EXERCISE NO. 8



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

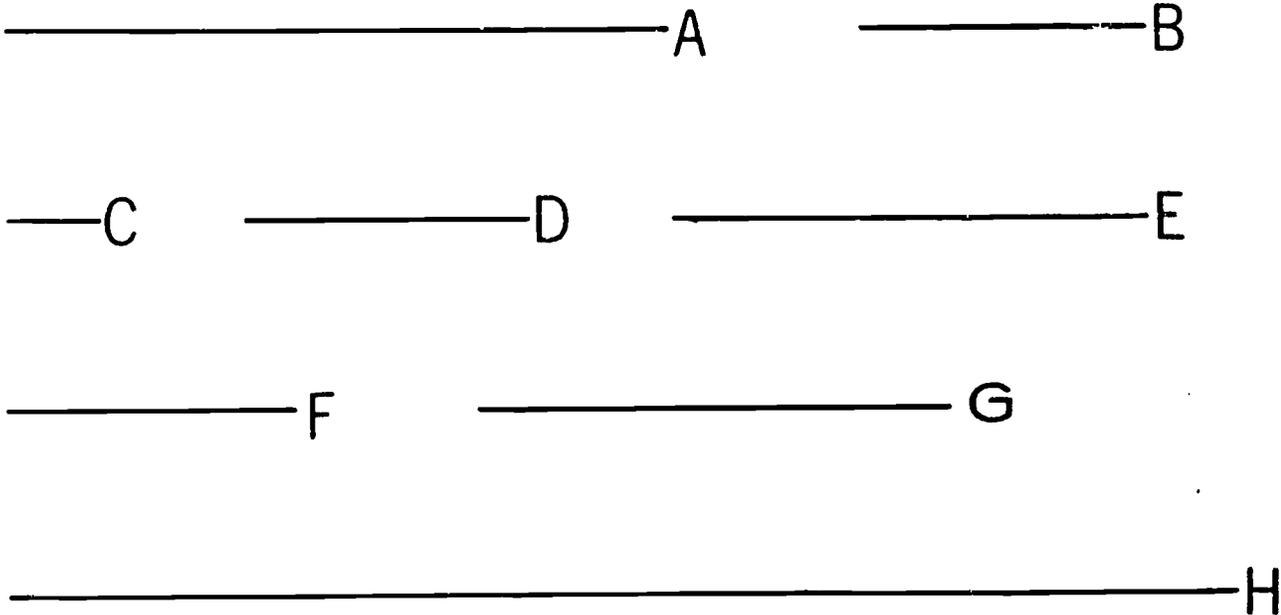
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

HALF INCH MEASUREMENT
EXERCISE NO. 9



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

LINE C IS ?

LINE H IS ?

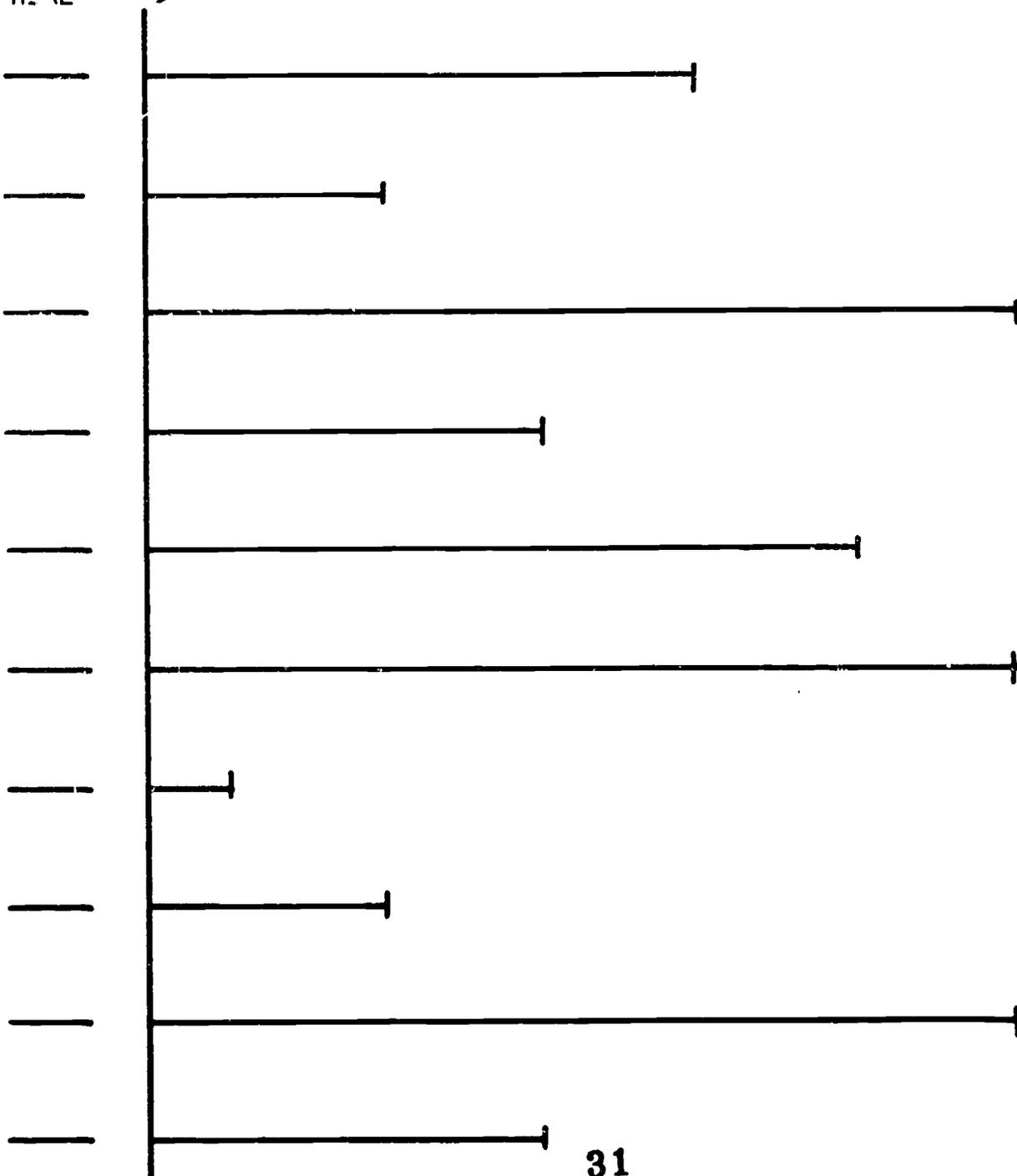
LINE D IS ?

LINE E IS ?

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

BEGIN MEASURING AT LINE



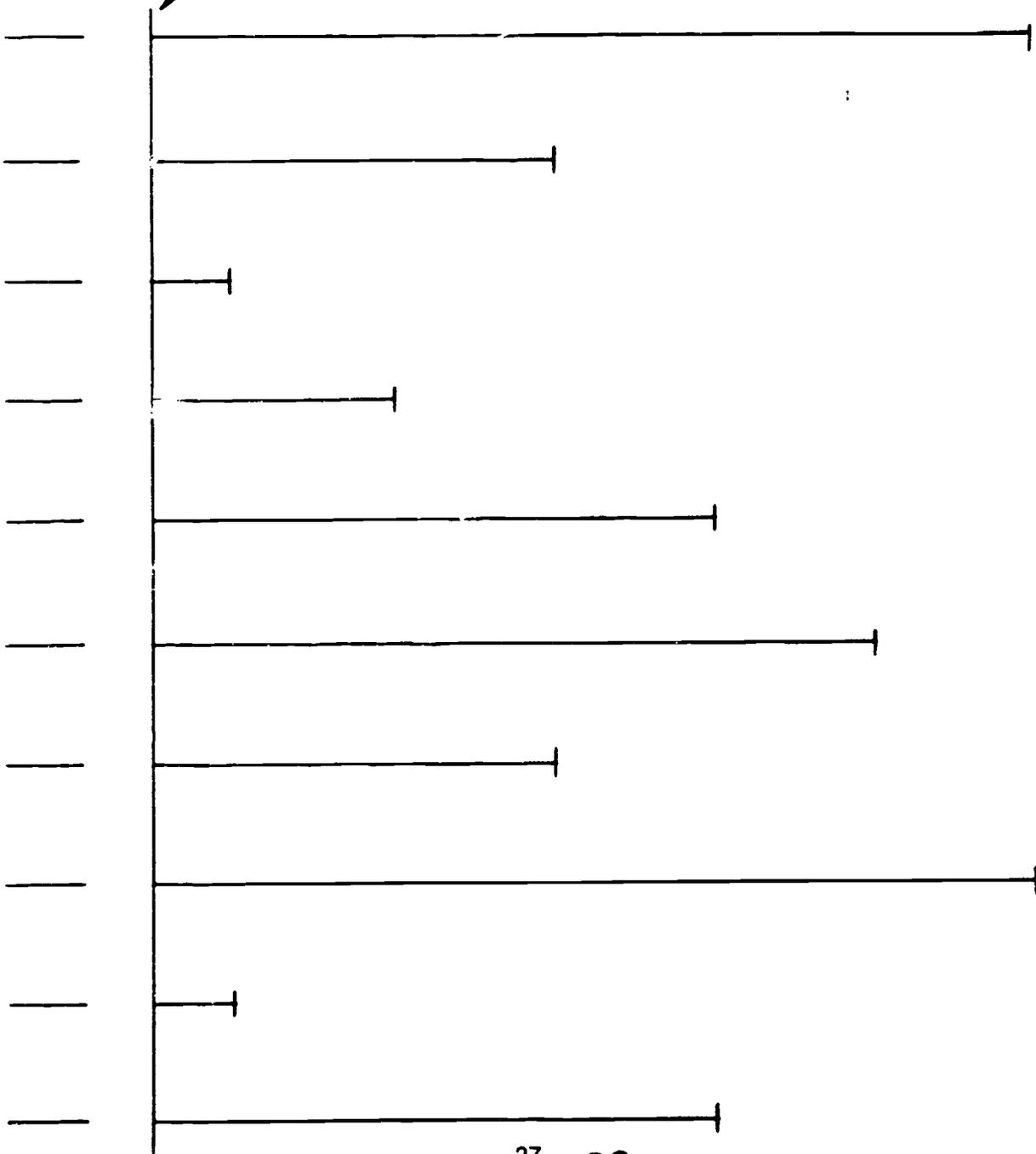
26

31

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

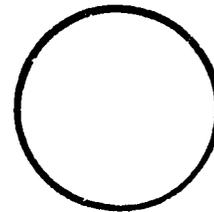
BEGIN MEASURING AT LINE



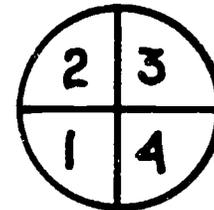
27 32

UNDERSTANDING FOURTH INCH MEASUREMENTS

Step 1
Think of a whole pie as being the same as one inch.



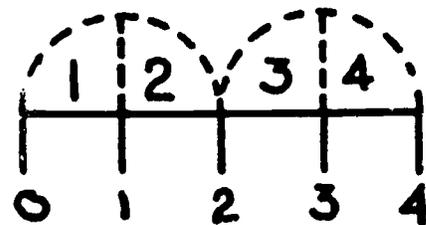
Step 2
Imagine that the pie is sliced into 4 equal parts (called fourths or quarters).



Step 3
Now picture the 4 slices of the pie arranged into this position. The base line of the pie (which equals one inch) is now divided into fourths.

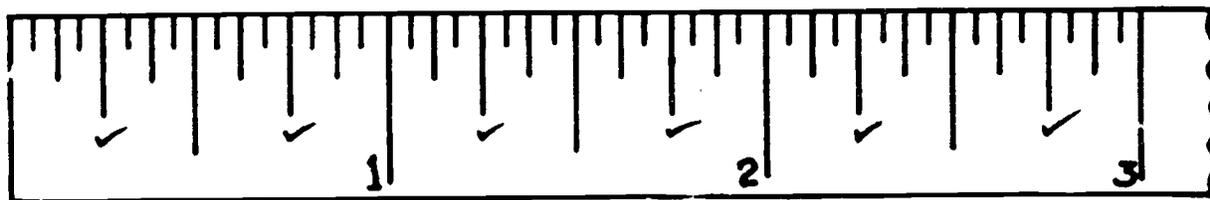


Step 4
Let's make a one-inch ruler from this base line. It will look like this.

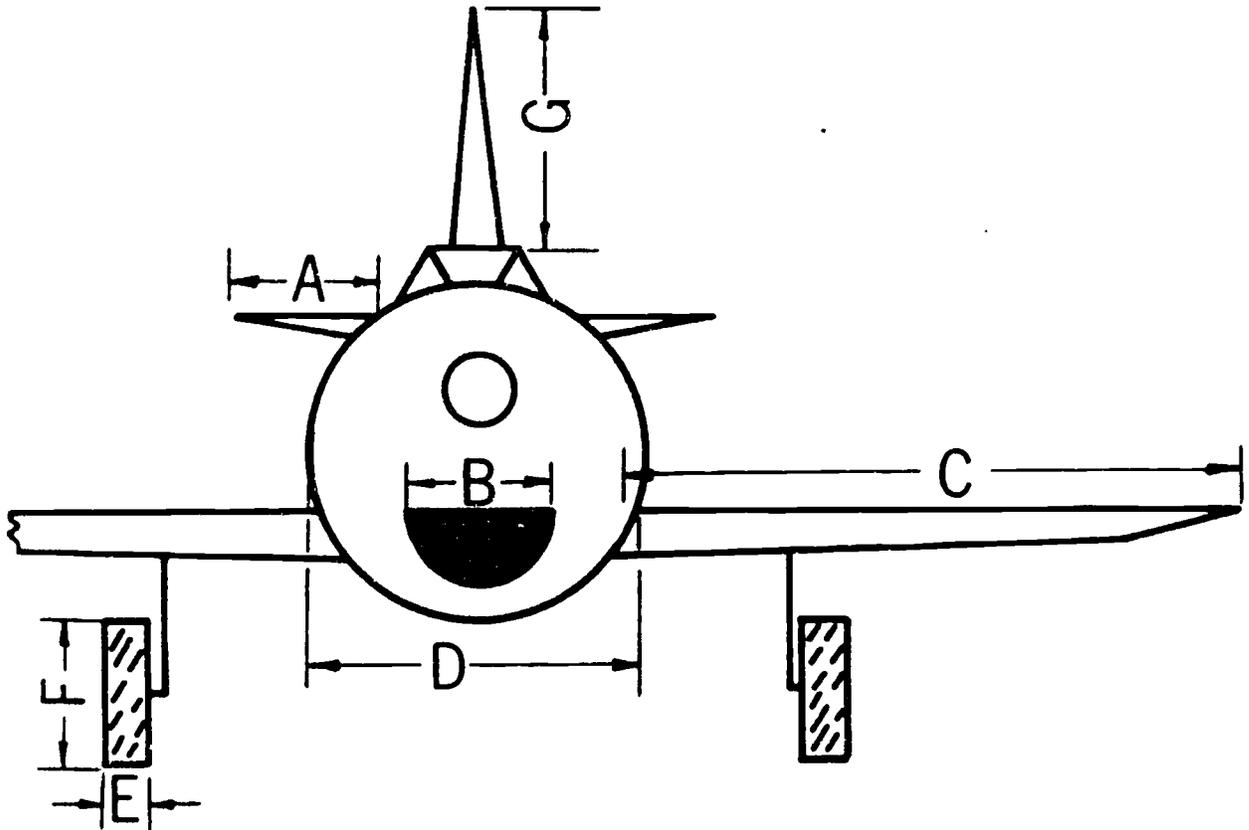


Step 5
When measuring always start at 0 and:
One Part = $\frac{1}{4}$ inch
Two Parts = $\frac{2}{4}$ inch or $\frac{1}{2}$ inch
Three Parts = $\frac{3}{4}$ inch
Four Parts = $\frac{4}{4}$ inch or 1 inch

Step 6
The fourth inch marks on a ruler are checked below.



FOURTH INCH MEASUREMENT
EXERCISE NO. 1



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

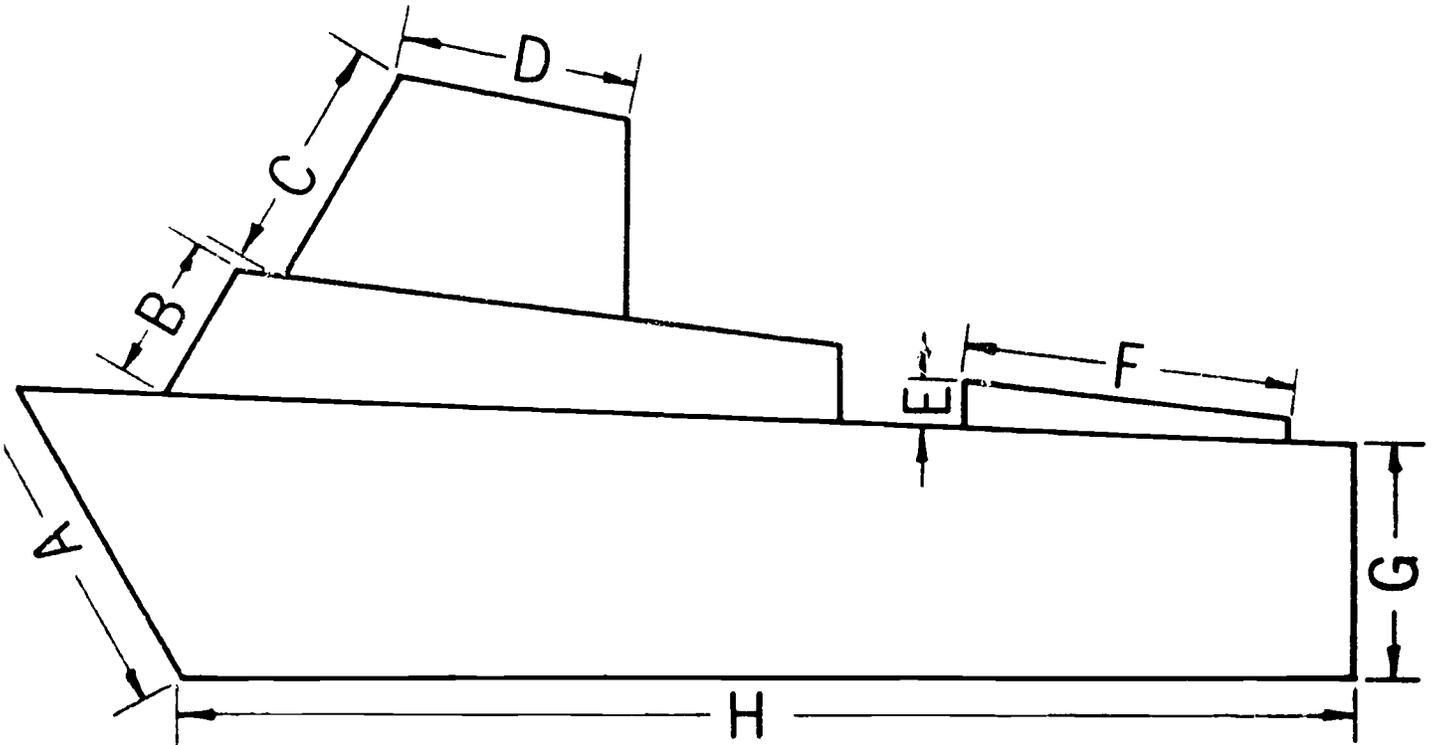
LINE G IS _____ ?

LINE C IS _____ ?

LINE D IS _____ ?

LINE E IS _____ ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

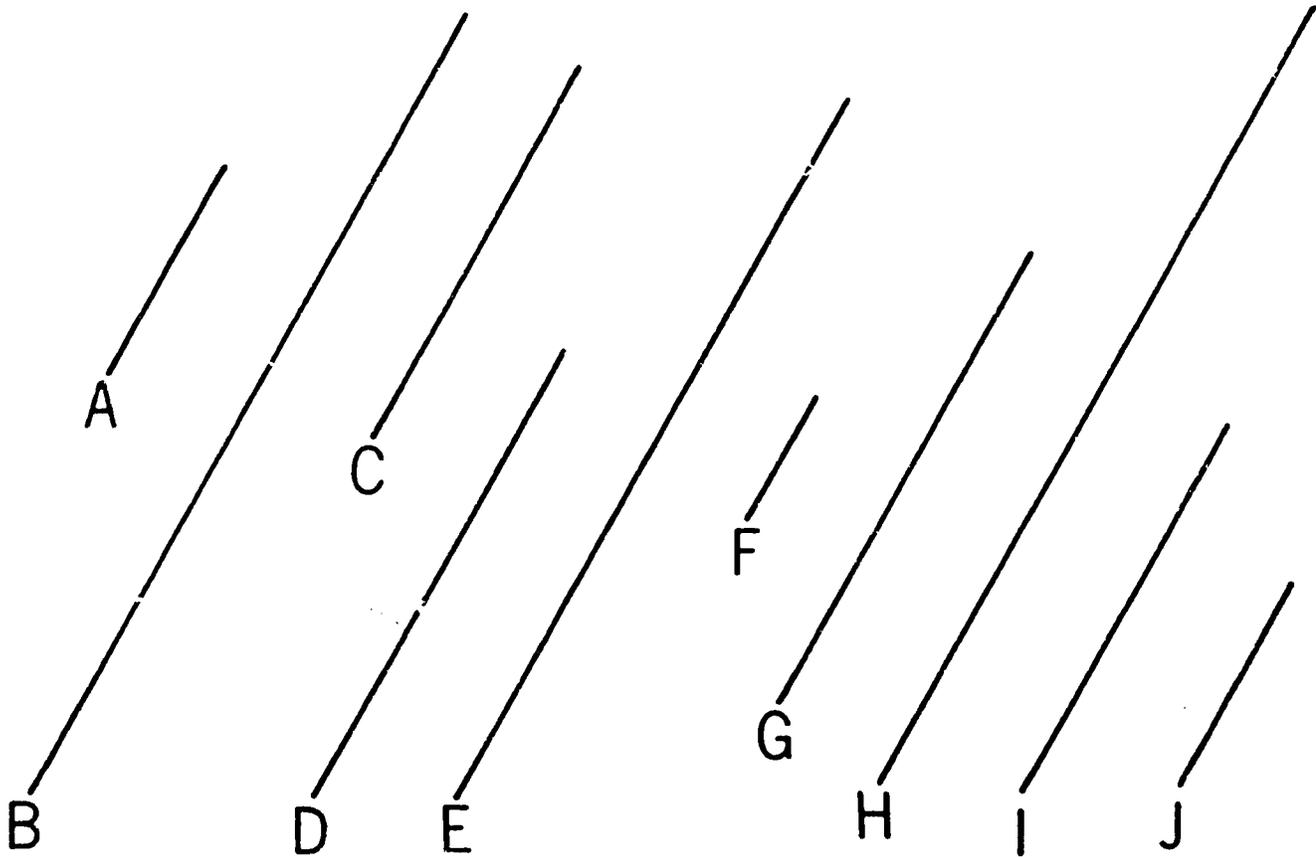
LINE C IS ?

LINE H IS ?

LINE D IS ?

LINE E IS ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 3



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

LINE H IS _____ ?

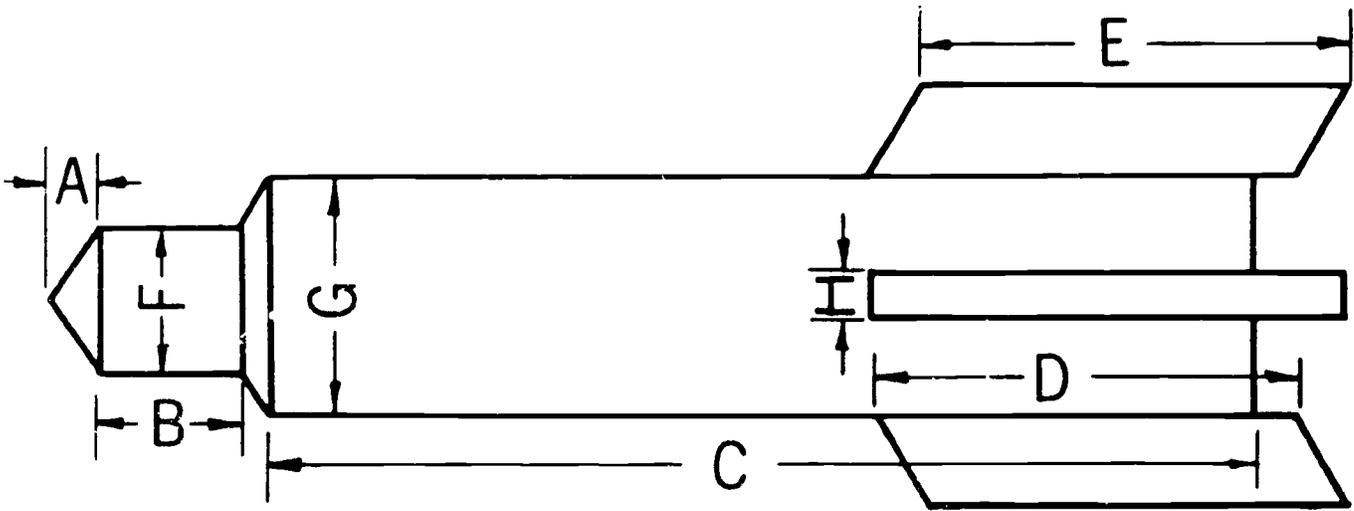
LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

LINE J IS _____ ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 4



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

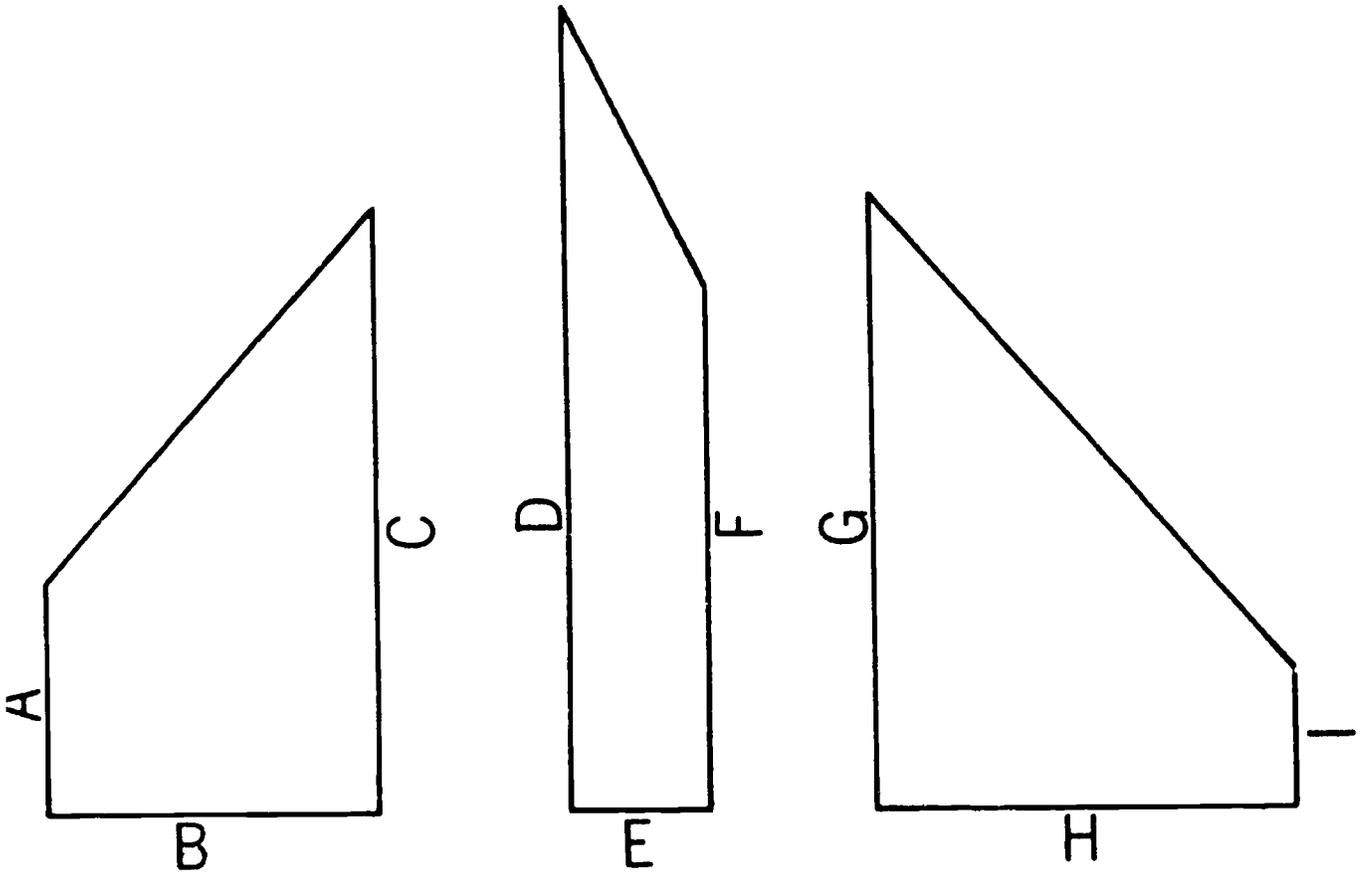
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

FOURTH INCH MEASUREMENT
EXERCISE NO. 5



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

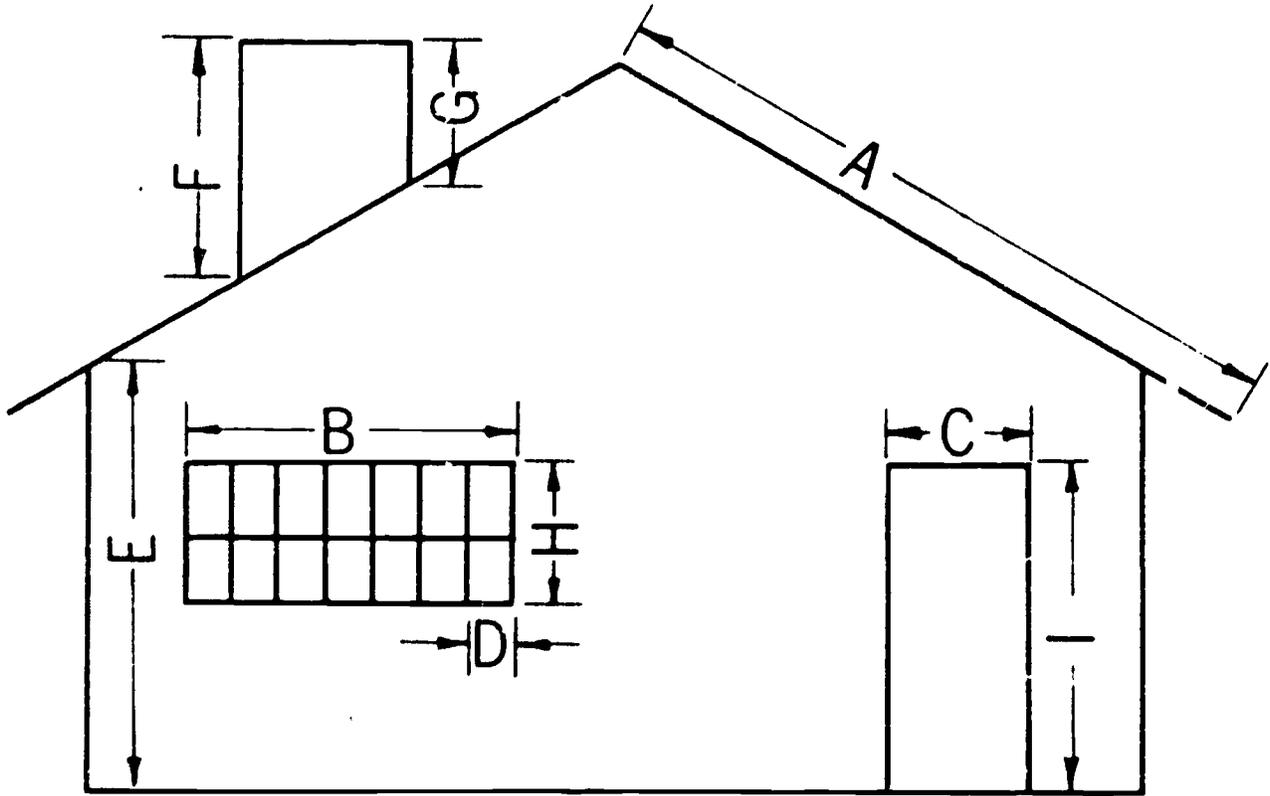
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

FOURTH INCH MEASUREMENT
EXERCISE NO. 6



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

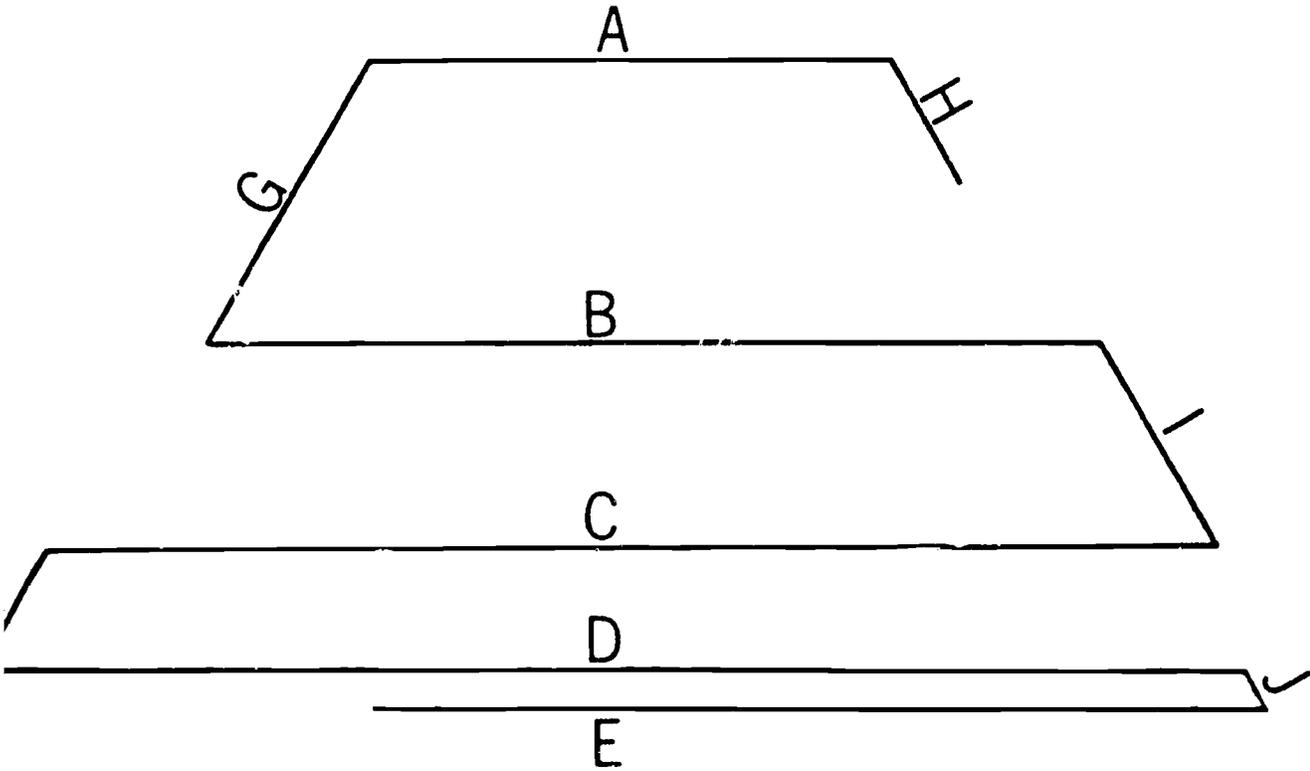
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 7



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

LINE C IS ?

LINE H IS ?

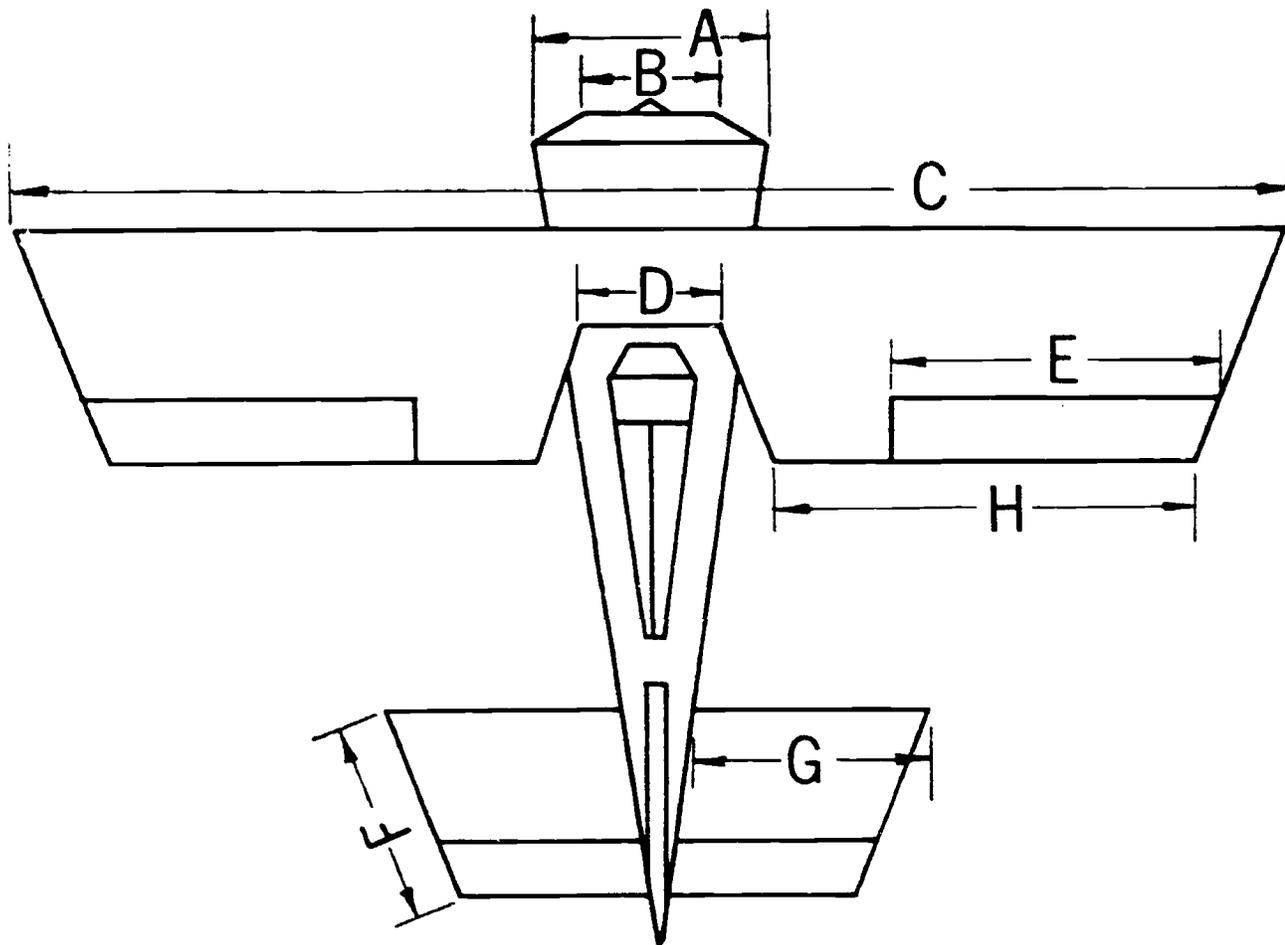
LINE D IS ?

LINE I IS ?

LINE E IS ?

LINE J IS ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 8



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

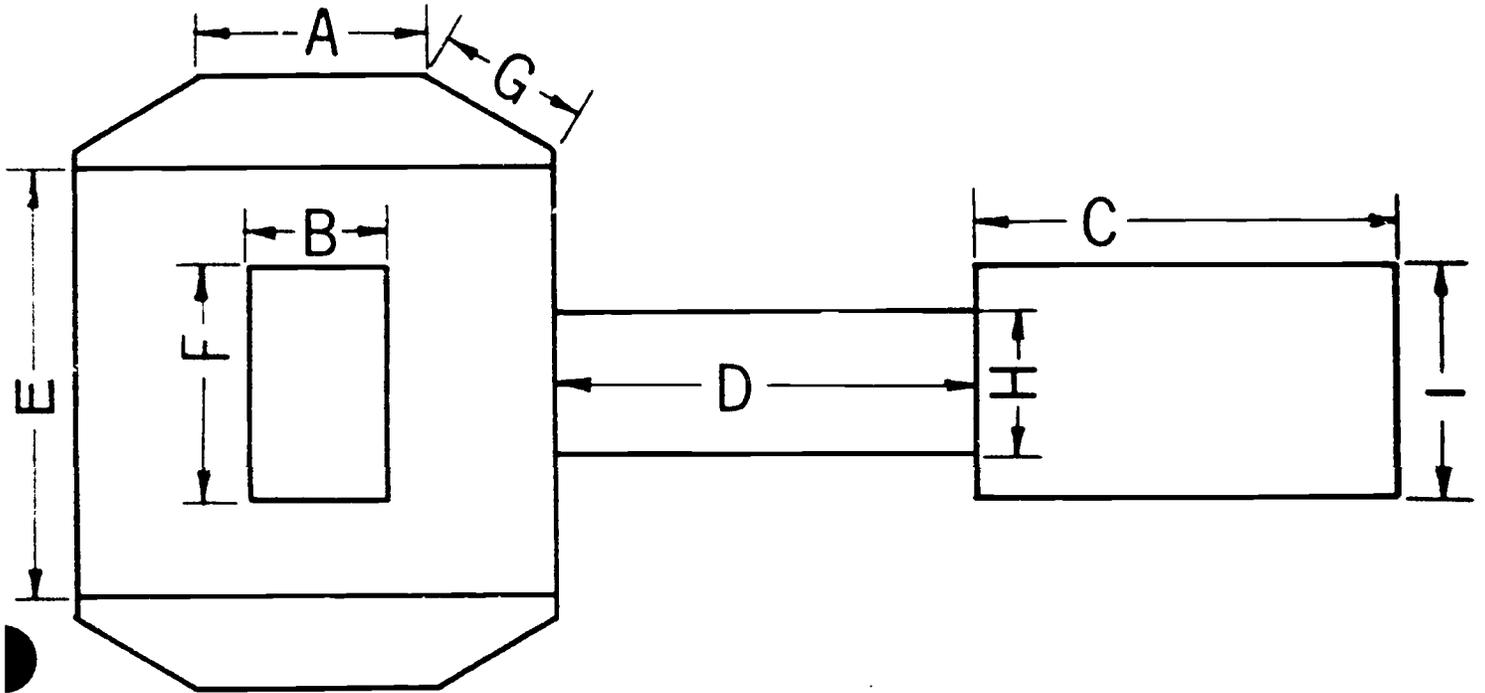
LINE C IS _____ ?

LINE H IS _____ ?

LINE D IS _____ ?

LINE E IS _____ ?

FOURTH INCH MEASUREMENT
EXERCISE NO. 9



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

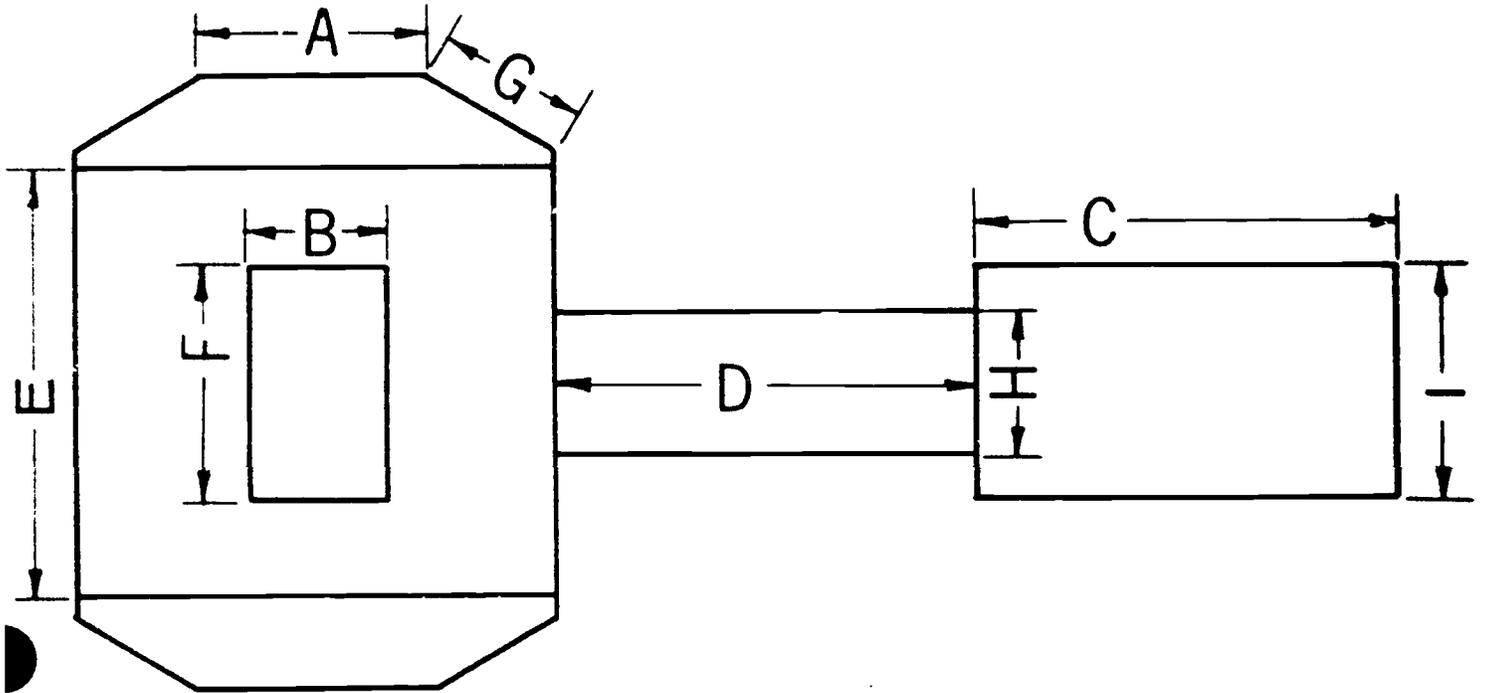
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

FOURTH INCH MEASUREMENT
EXERCISE NO. 9



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

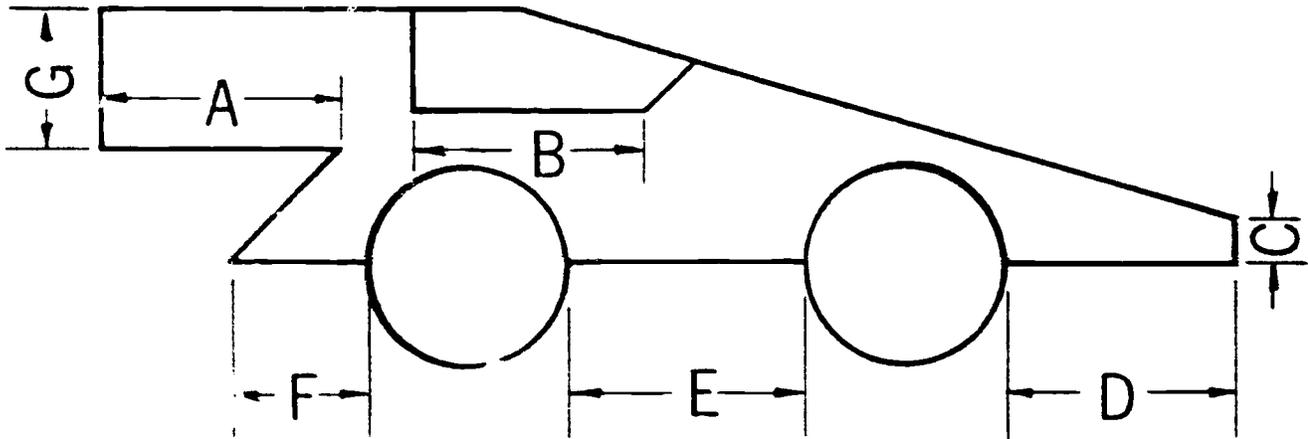
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

FOURTH INCH MEASUREMENT
EXERCISE NO. 10



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

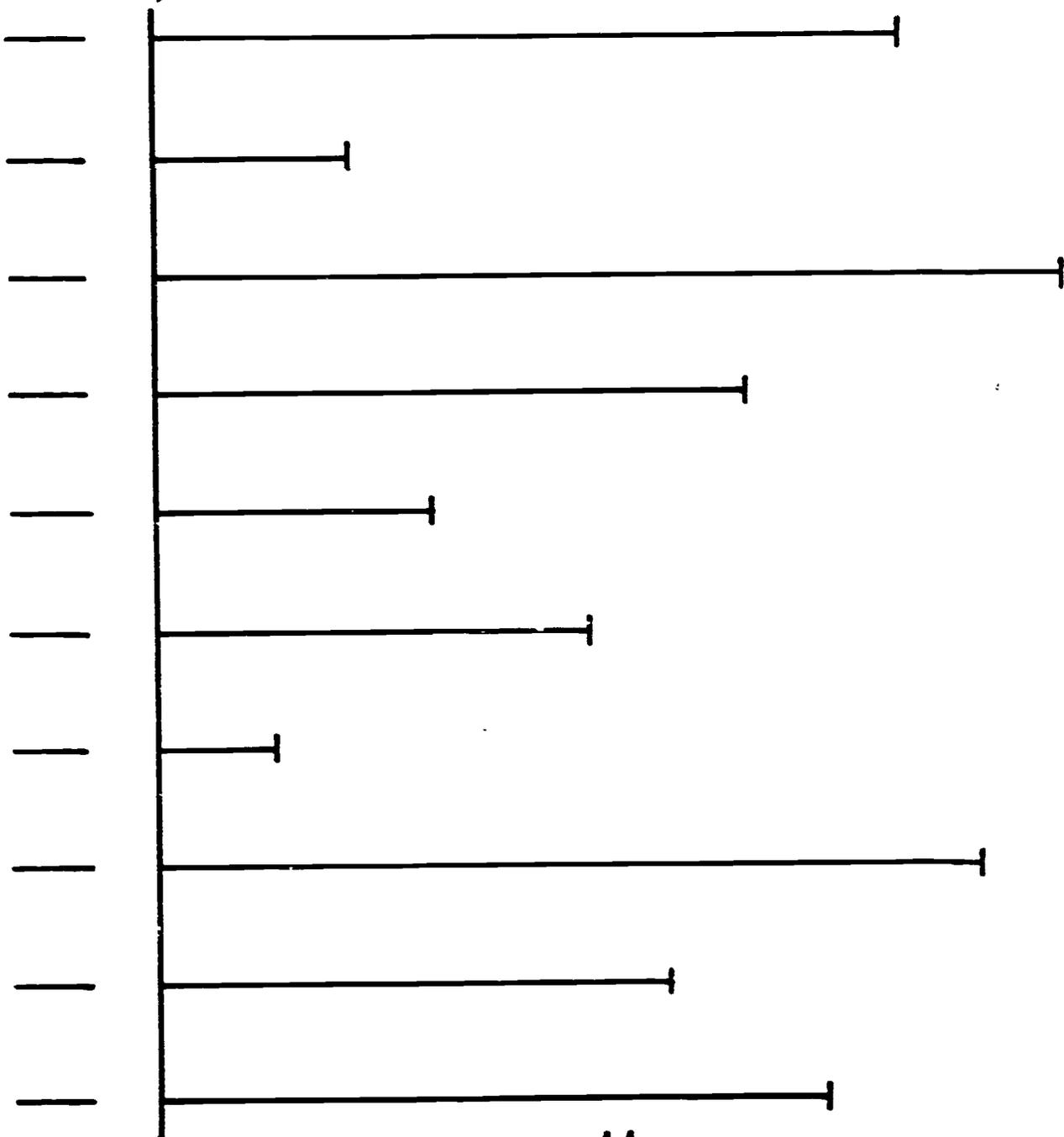
LINE D IS _____?

LINE E IS _____?

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

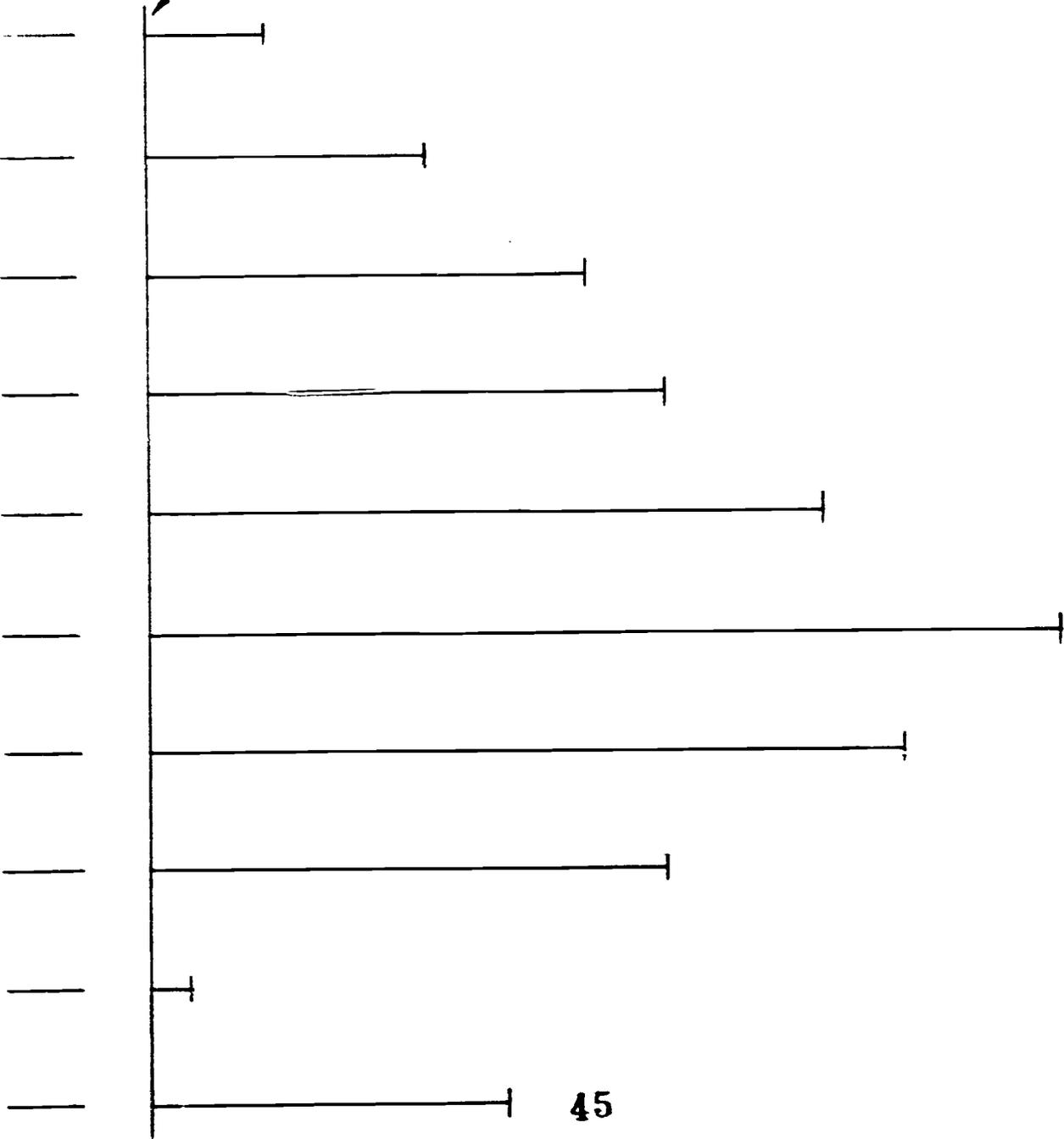
BEGIN MEASURING AT LINE



MEASURE LINES AND MARK ANSWERS

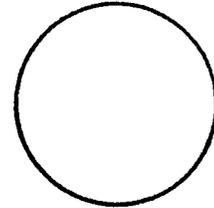
MARK
ANSWER
HERE

BEGIN MEASURING AT LINE

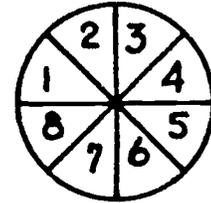


UNDERSTANDING EIGHTH INCH MEASUREMENTS

Step 1
Think of a whole pie as being the same as one inch.



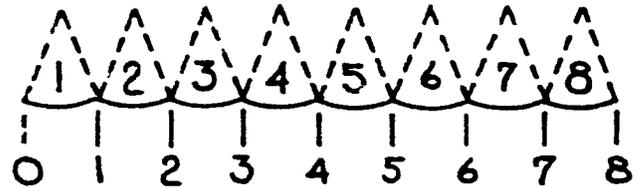
Step 2
Imagine that the pie is sliced into 8 equal parts (called eighths).



Step 3
Now picture the 8 slices of the pie arranged into this position; the base line of the pie (which equals one inch) is now divided into eighths.



Step 4
Let's make a one-inch ruler from this base line. It will look like this.



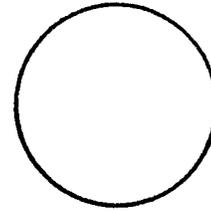
Step 5
When measuring always start at 0 and:
One Part = 1/8 inch
Two Parts = 2/8 inch or 1/4 inch
Three Parts = 3/8 inch
Four Parts = 4/8 inch or 1/2 inch
Eight Parts = 8/8 inch or 1 inch

Step 6
The eighth inch marks on a ruler are checked below.

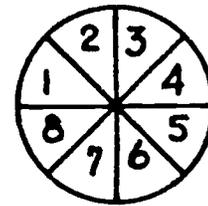


UNDERSTANDING EIGHTH INCH MEASUREMENTS

Step 1
Think of a whole pie as being the same as one inch.



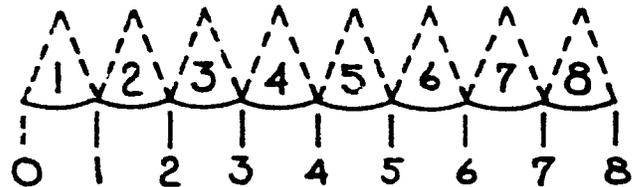
Step 2
Imagine that the pie is sliced into 8 equal parts (called eighths).



Step 3
Now picture the 8 slices of the pie arranged into this position: the base line of the pie (which equals one inch) is now divided into eighths.

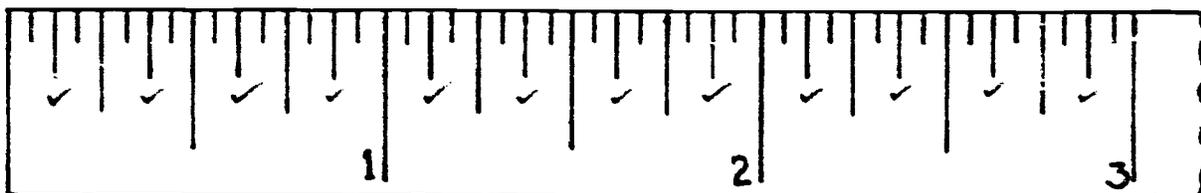


Step 4
Let's make a one-inch ruler from this base line. It will look like this.

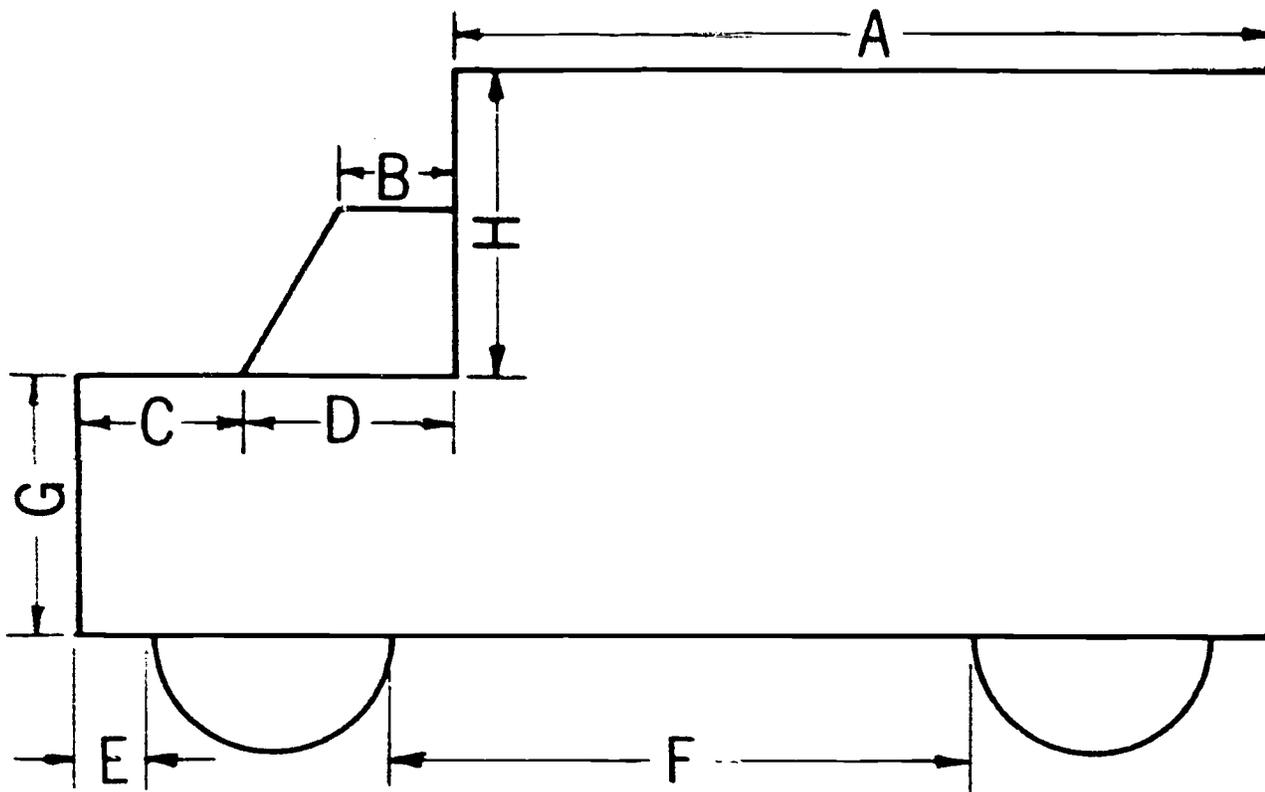


Step 5
When measuring always start at 0 and
One Part = 1/8 inch
Two Parts = 2/8 inch or 1/4 inch
Three Parts = 3/8 inch
Four Parts = 4/8 inch or 1/2 inch
Eight Parts = 8/8 inch or 1 inch

Step 6
The eighth inch marks on a ruler are checked below.



EIGHTH INCH MEASUREMENT
EXERCISE NO. 1



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

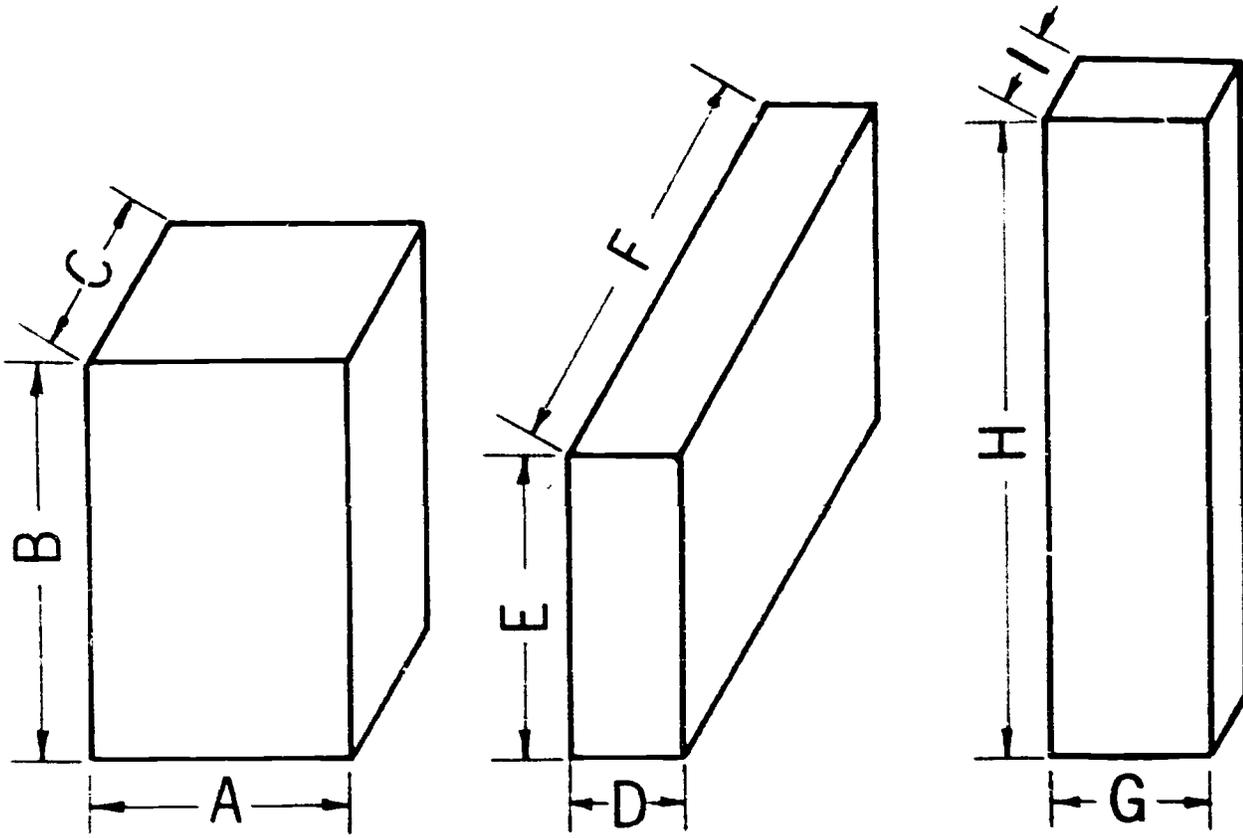
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

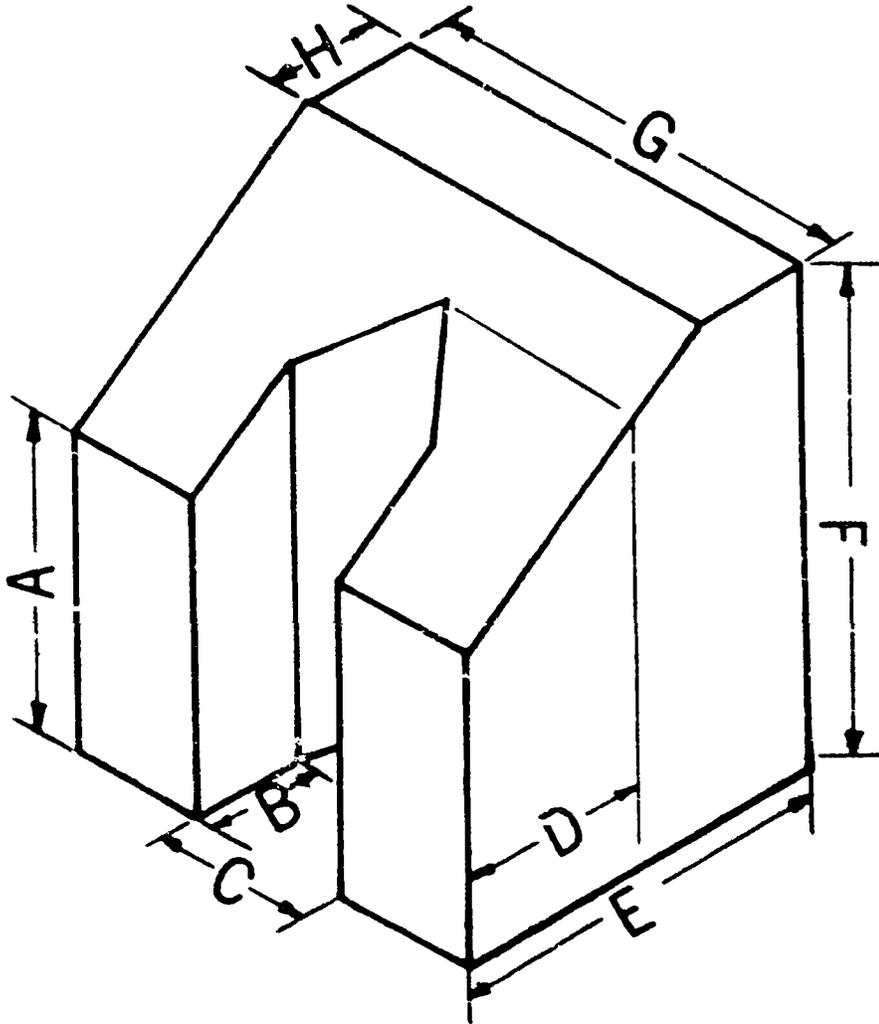
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 3



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

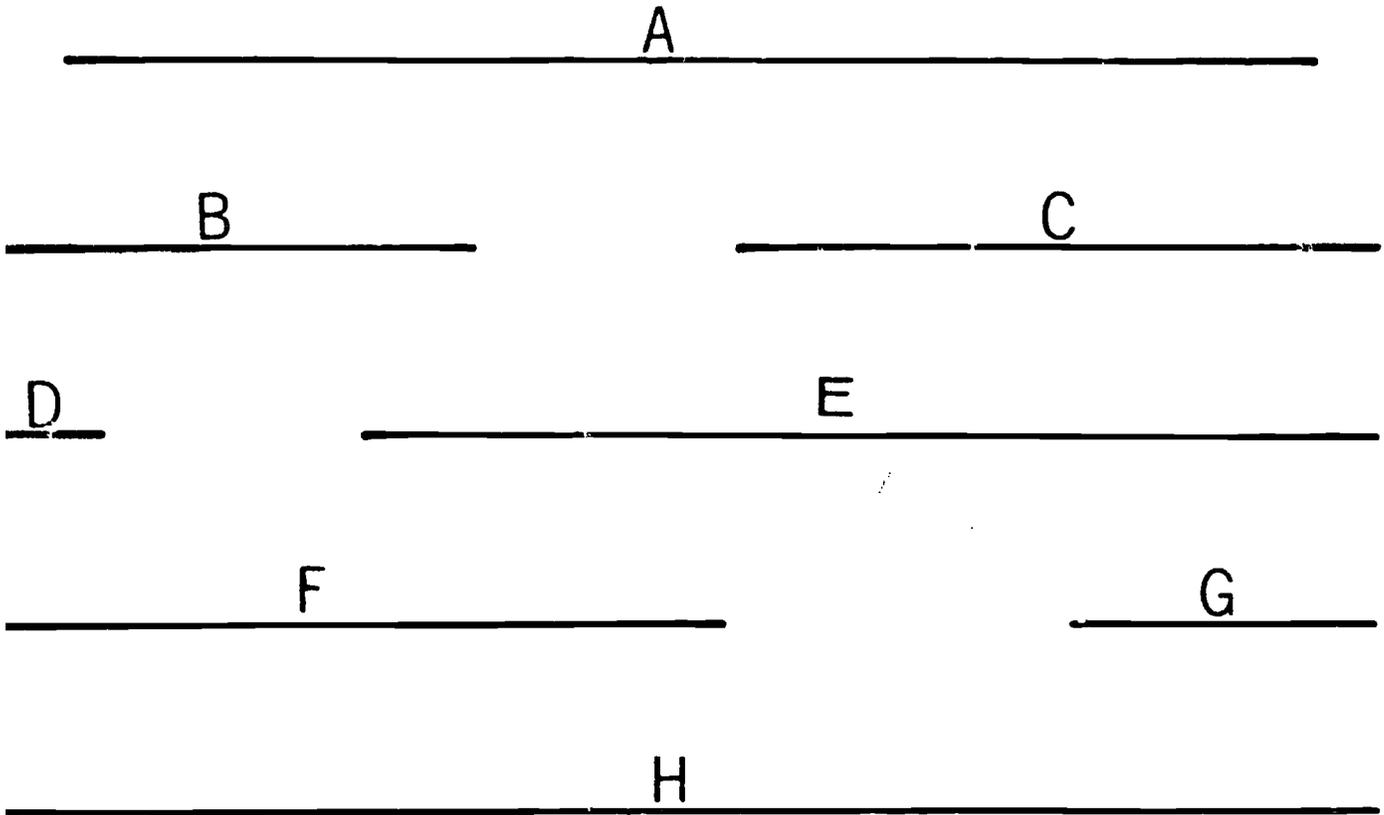
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 4



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

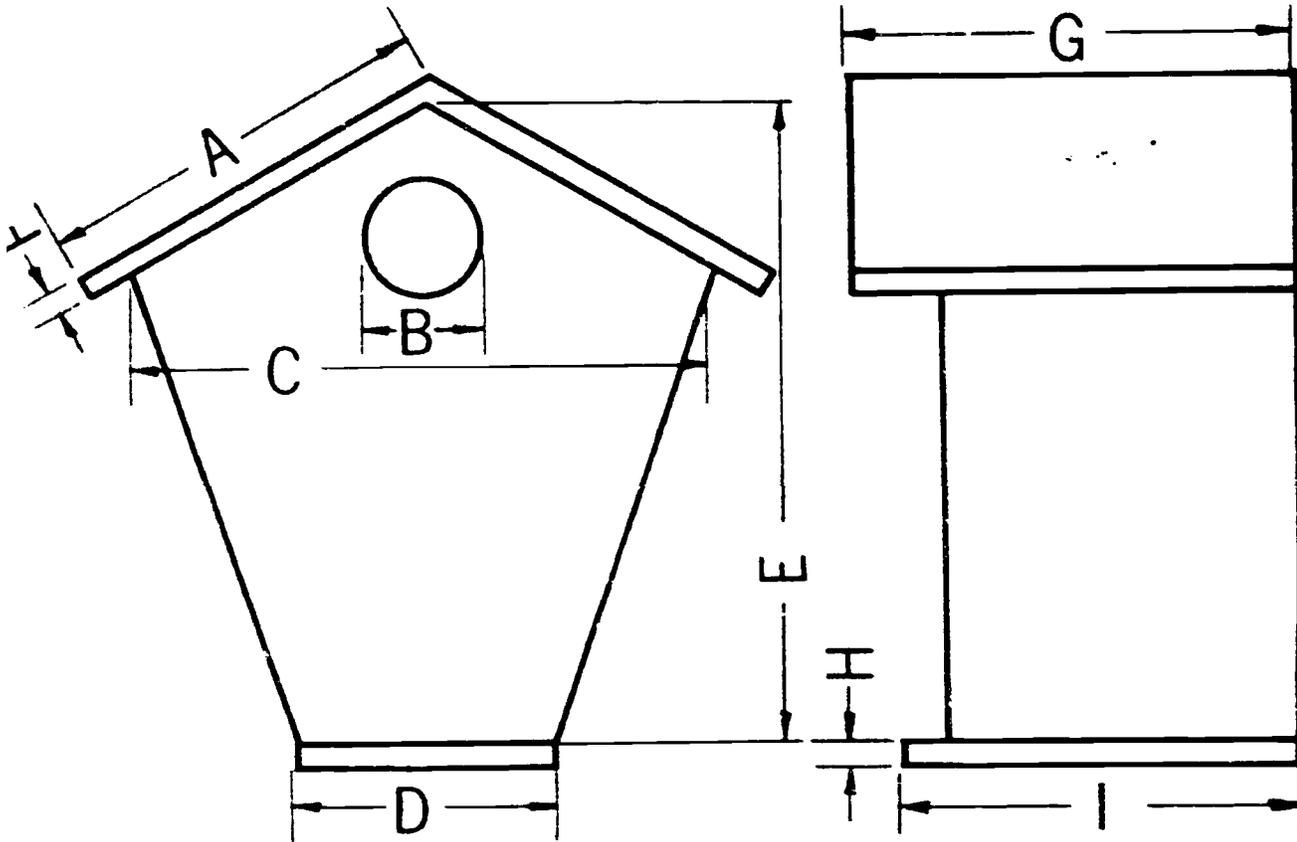
LINE C IS ?

LINE H IS ?

LINE D IS ?

LINE E IS ?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 5



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

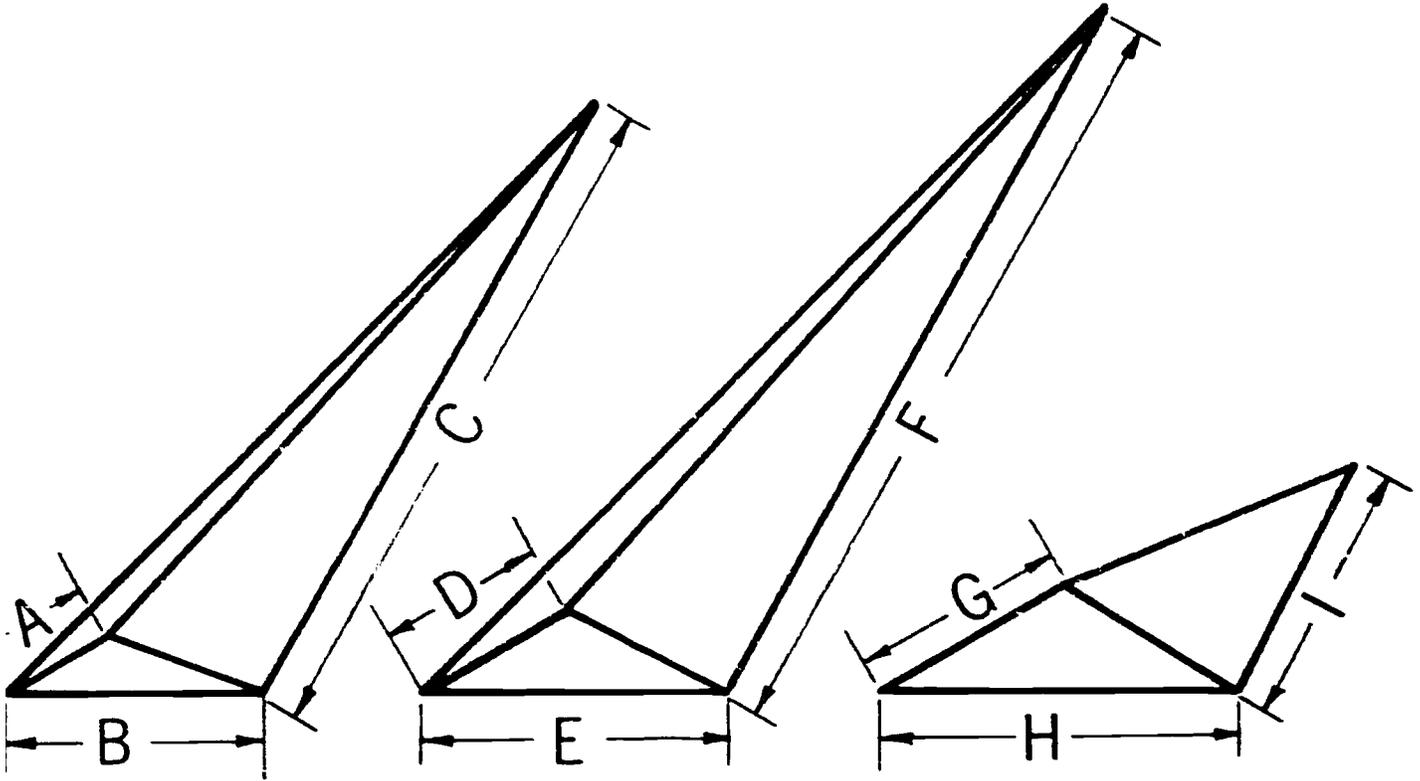
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 6



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

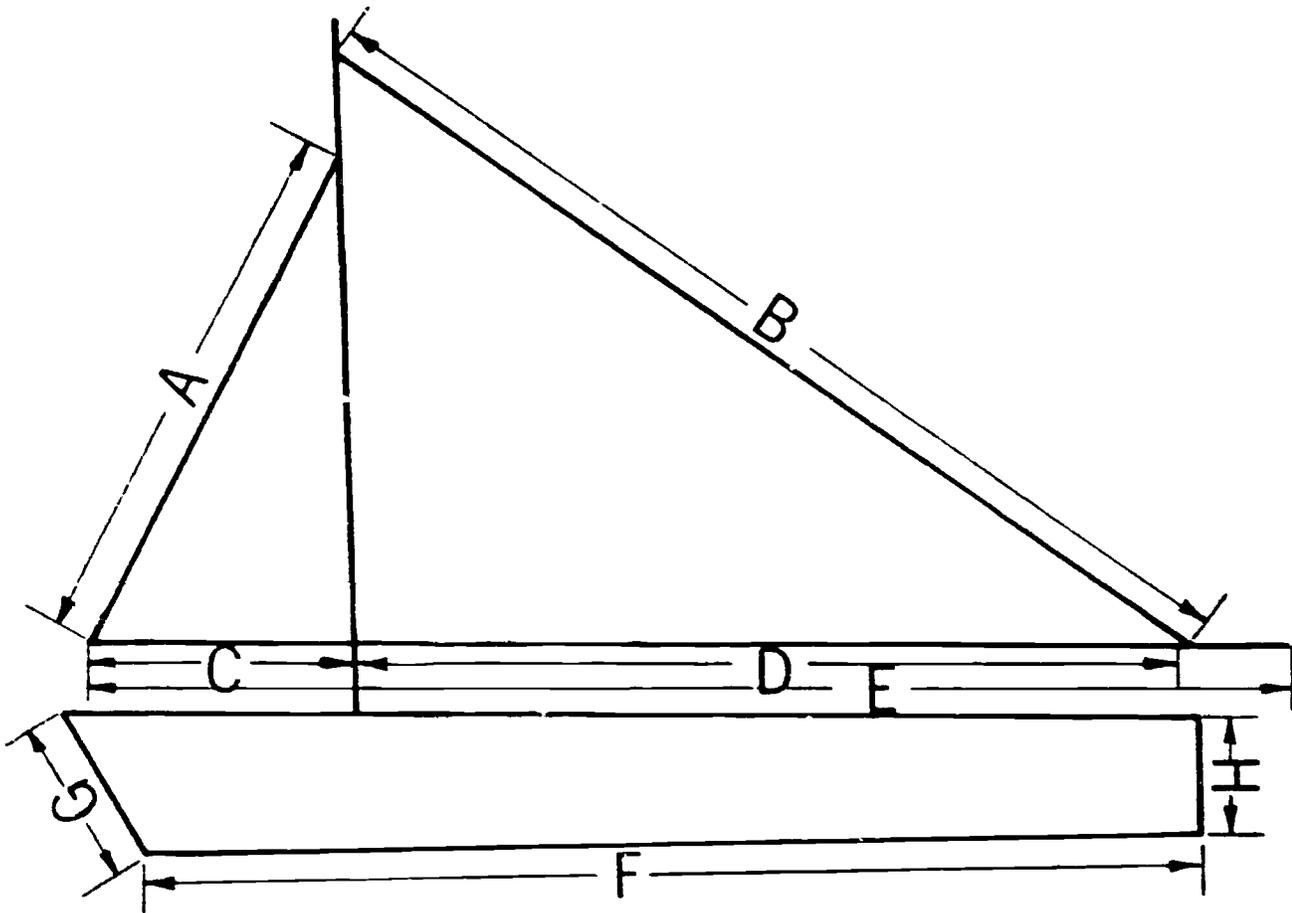
LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 7



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELCW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

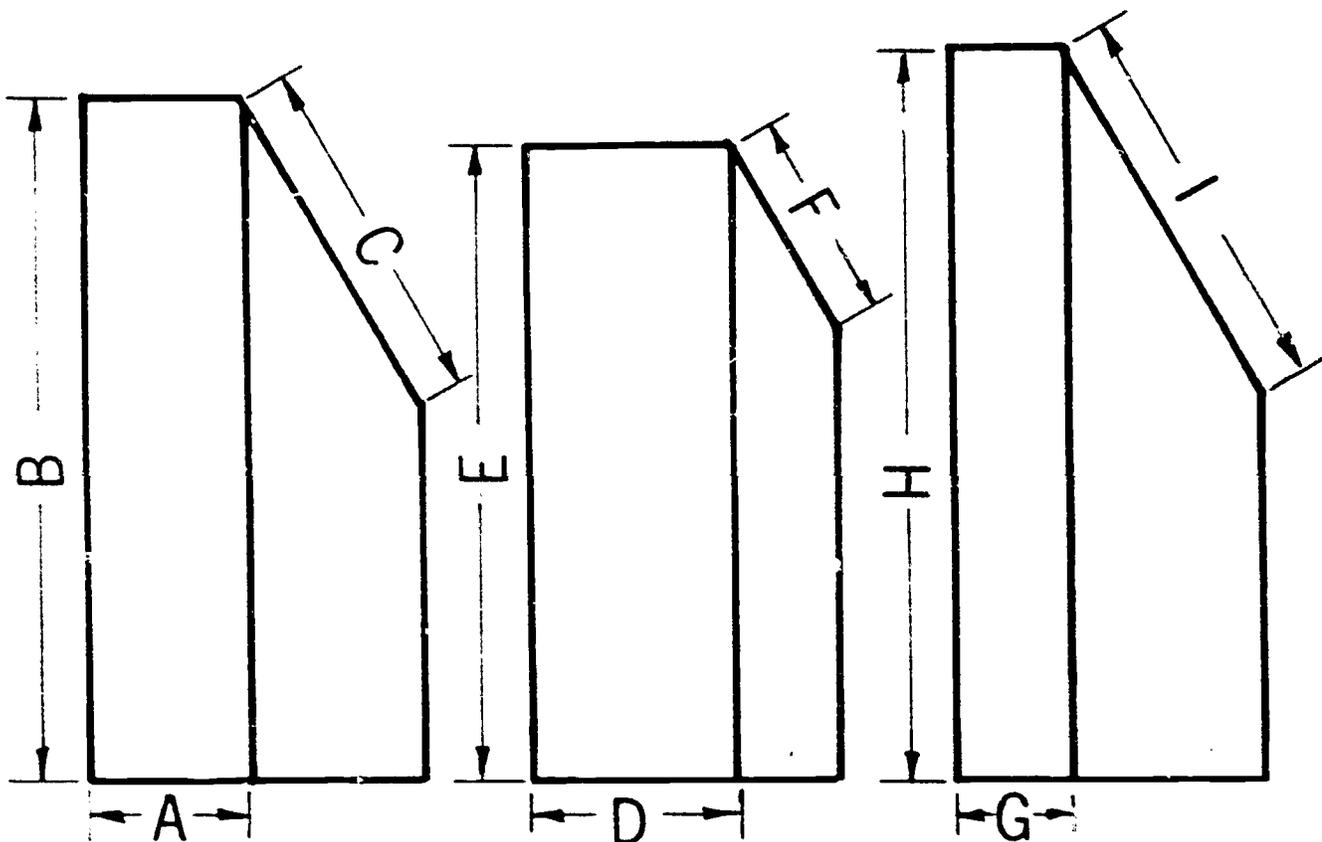
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 8



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

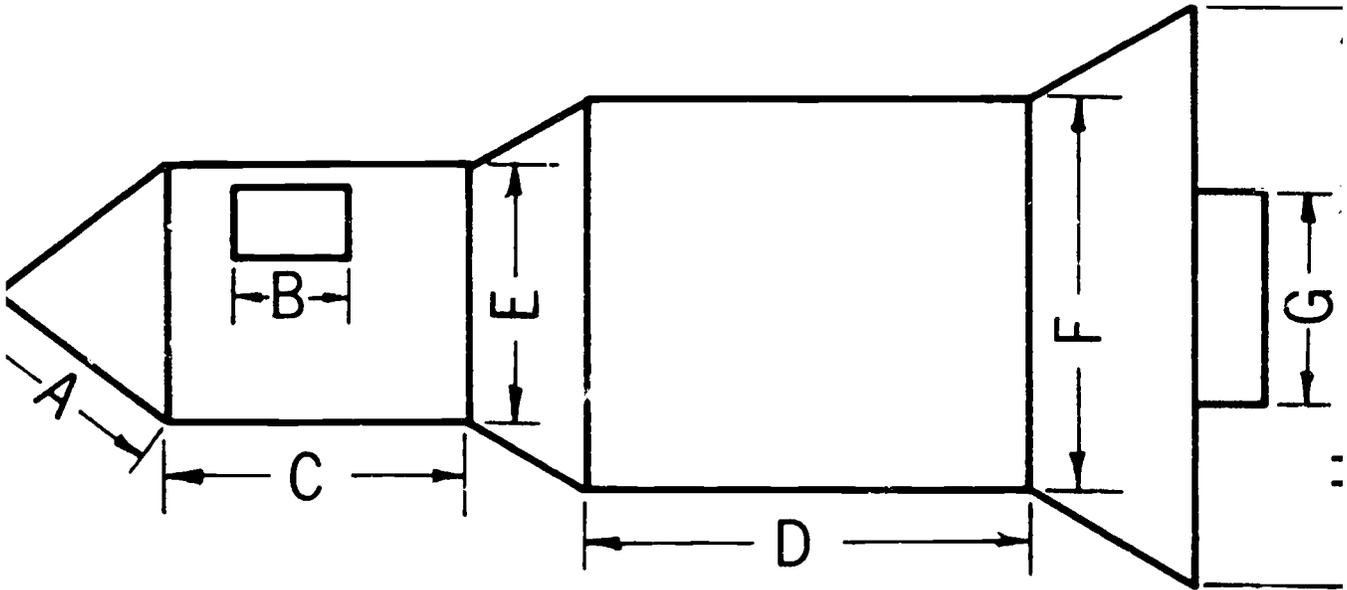
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

EIGHTH INCH MEASUREMENT
EXERCISE NO. 9



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

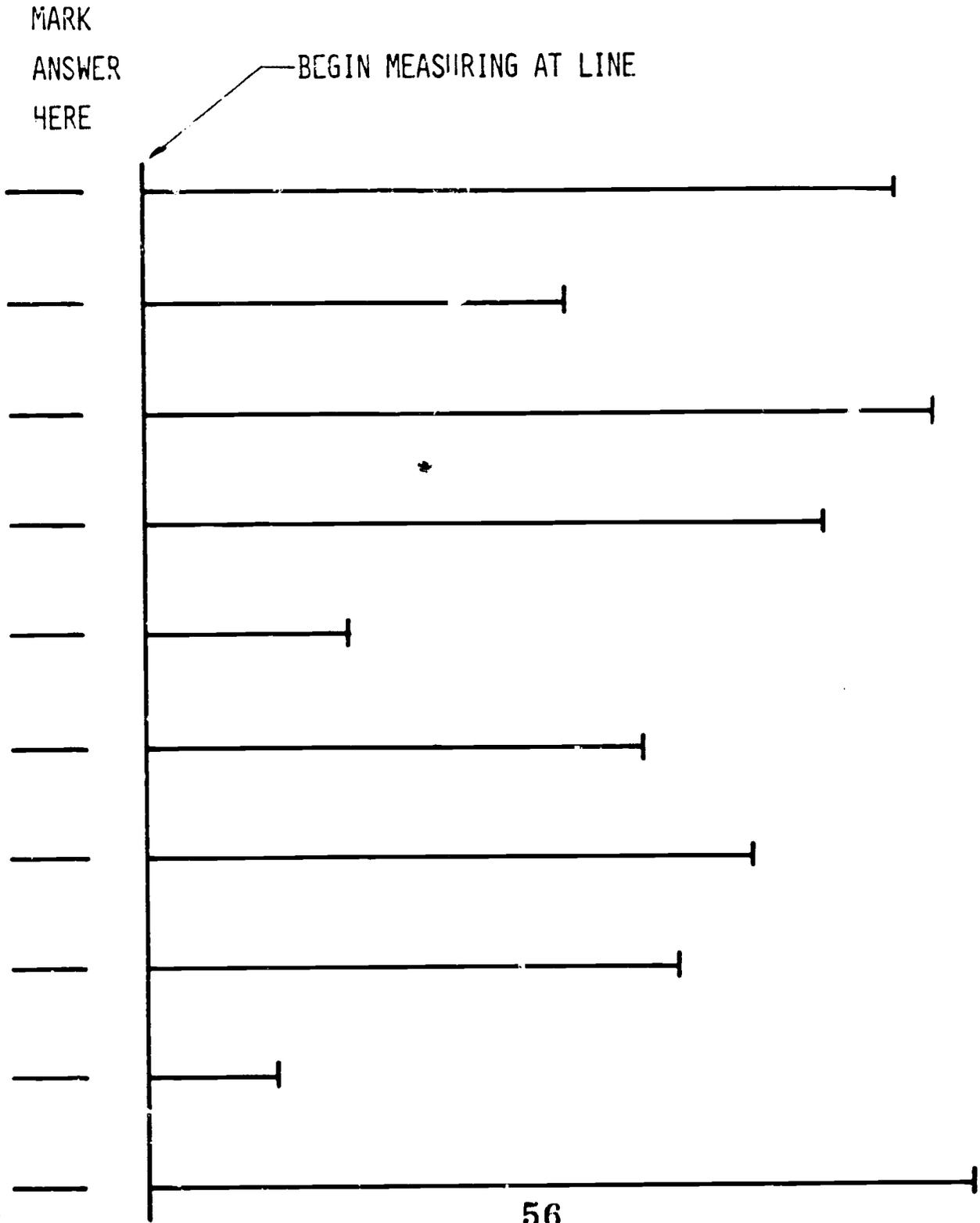
LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE E IS _____?

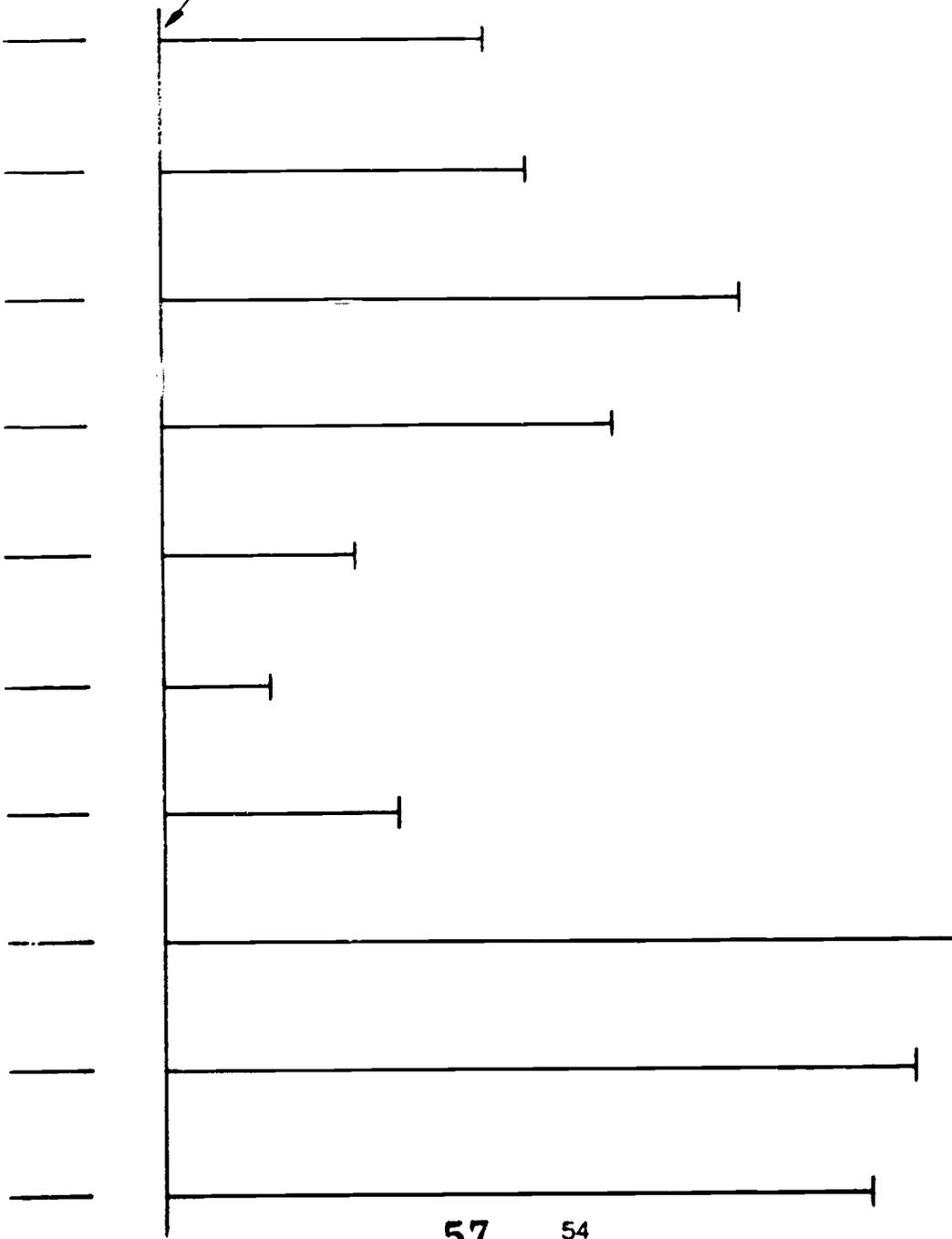
MEASURE LINES AND MARK ANSWERS



MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

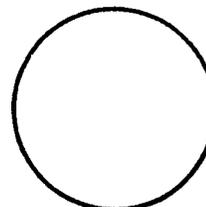
BEGIN MEASURING AT LINE



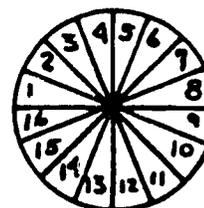
57 54

UNDERSTANDING SIXTEENTH INCH MEASUREMENTS

Step 1
Think of a whole pie as being the same as one inch.



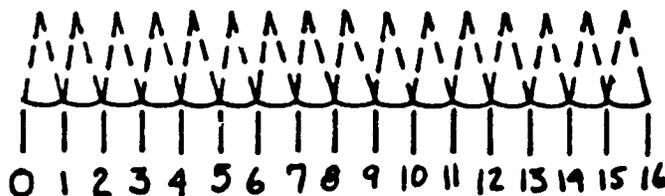
Step 2
Imagine that the pie is sliced into 16 equal parts (called sixteenths).



Step 3
Now picture the 16 slices of the pie arranged into this position; the base line of the pie (which equals one inch) is now divided into sixteenths.

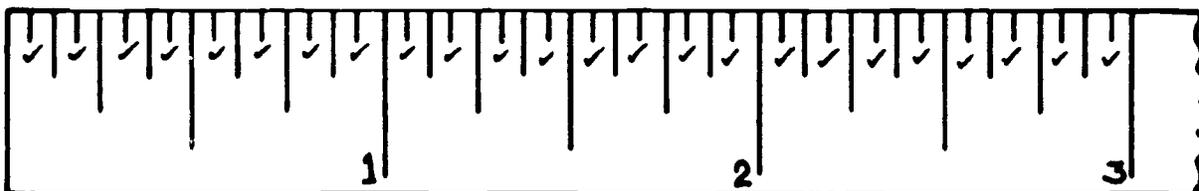


Step 4
Let's make a one-inch ruler from this base line. It will look like this.

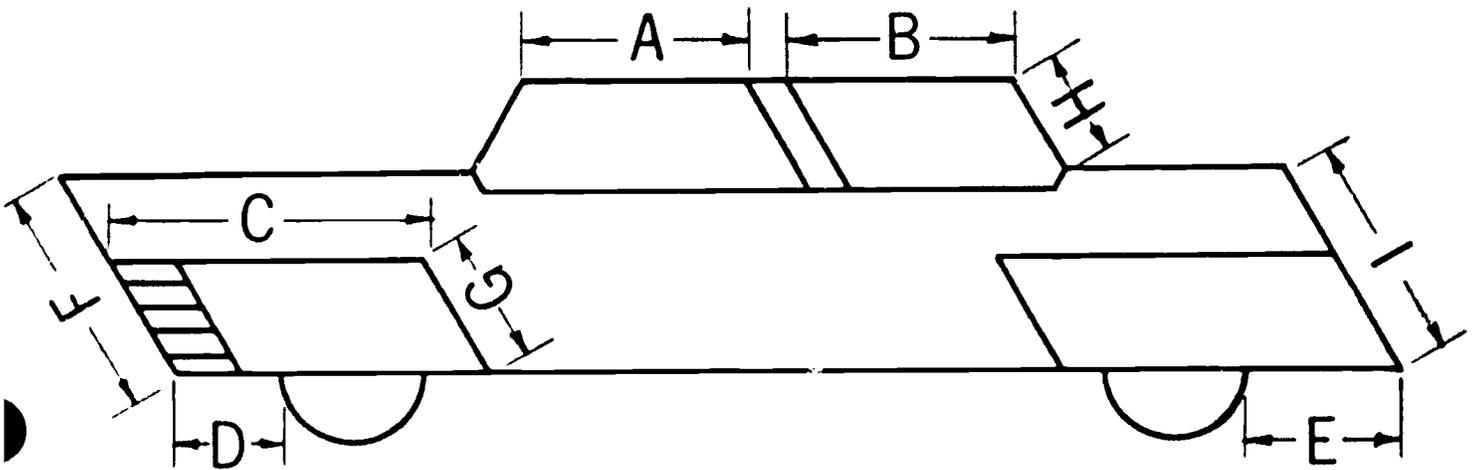


Step 5
When measuring always start at 0 and:
One Part = $1/16$ inch
Two Parts = $2/16$ inch or $1/8$ inch
Three Parts = $3/16$ inch
Four Parts = $4/16$ inch or $1/4$ inch
Sixteen Parts = $16/16$ inch or 1 inch

Step 6
The sixteenth inch marks on a ruler are checked below.



SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 1



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

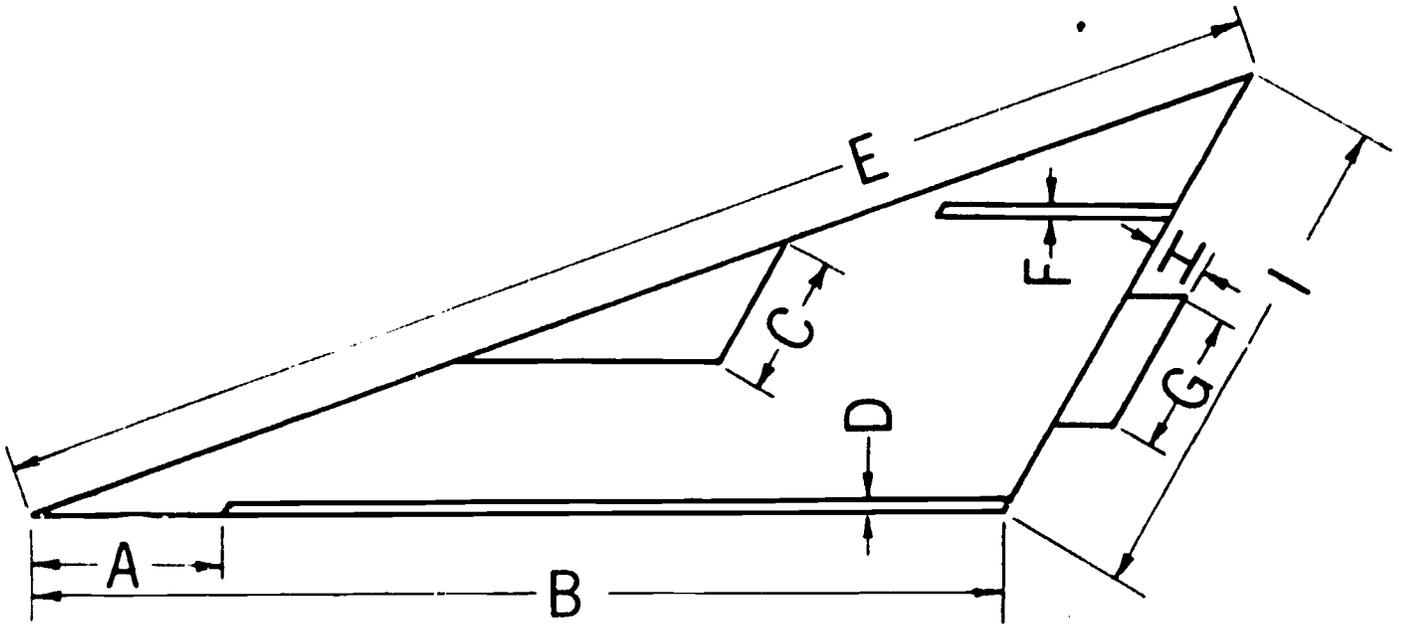
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 2



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

LINE C IS ?

LINE H IS ?

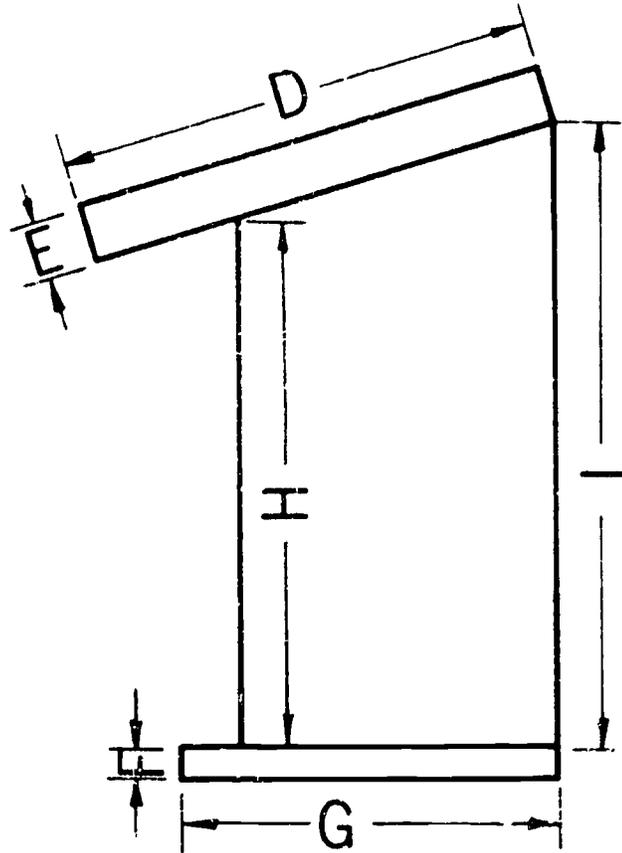
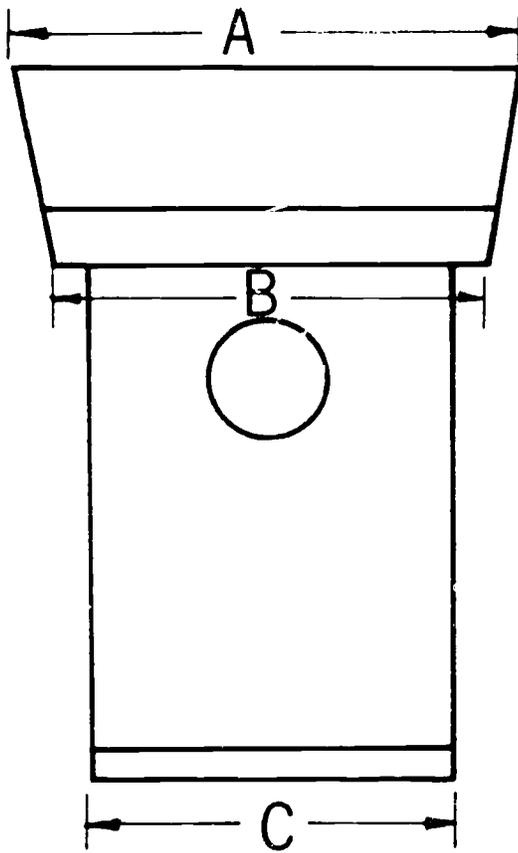
LINE D IS ?

LINE I IS ?

LINE E IS ?

60

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 3



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

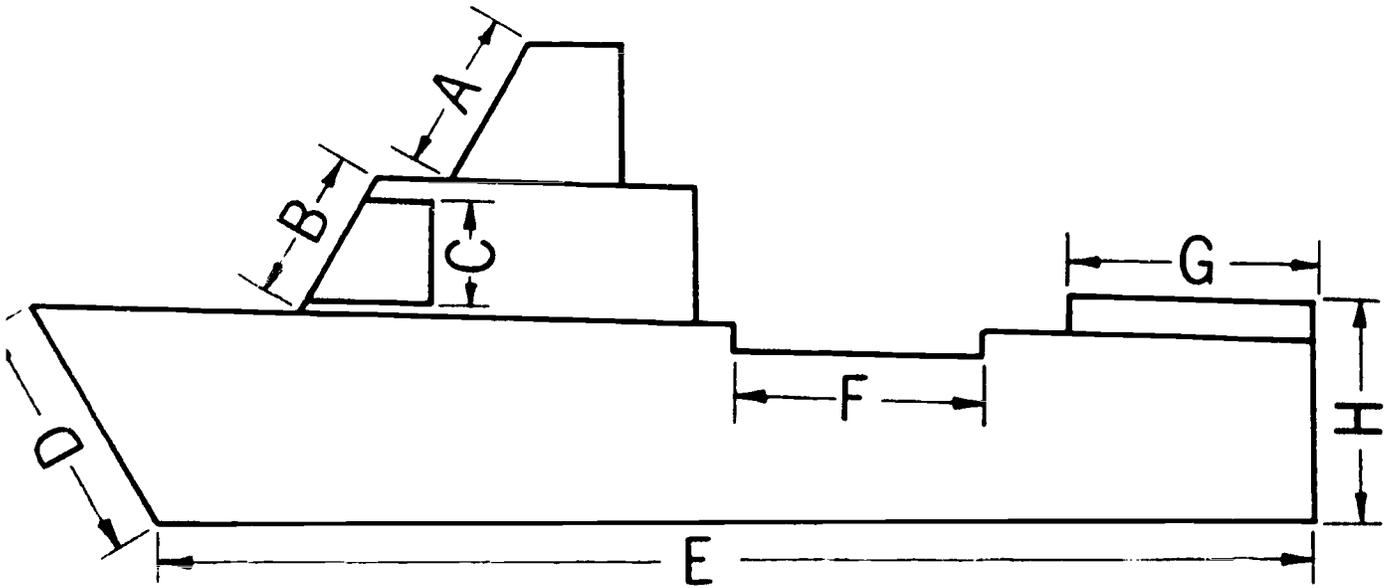
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 4



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

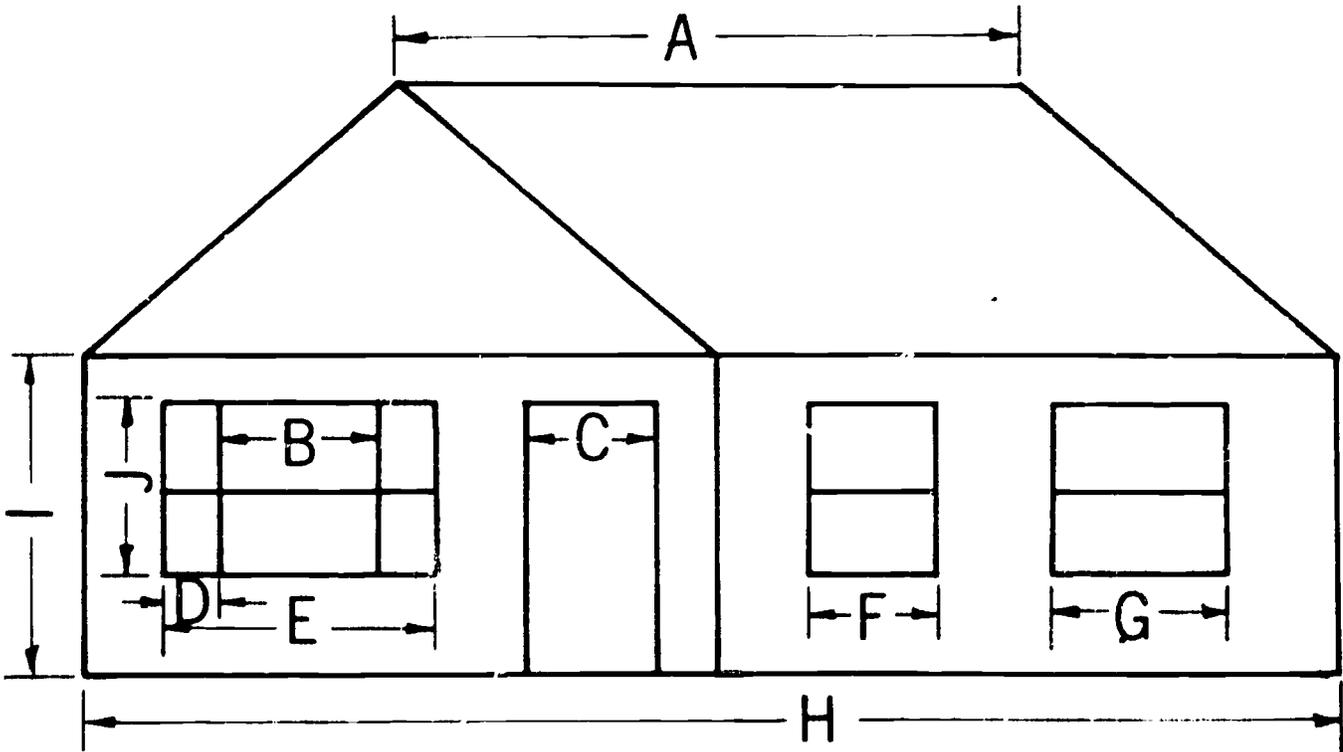
LINE C IS ?

LINE H IS ?

LINE D IS ?

LINE E IS ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 5



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

LINE H IS _____ ?

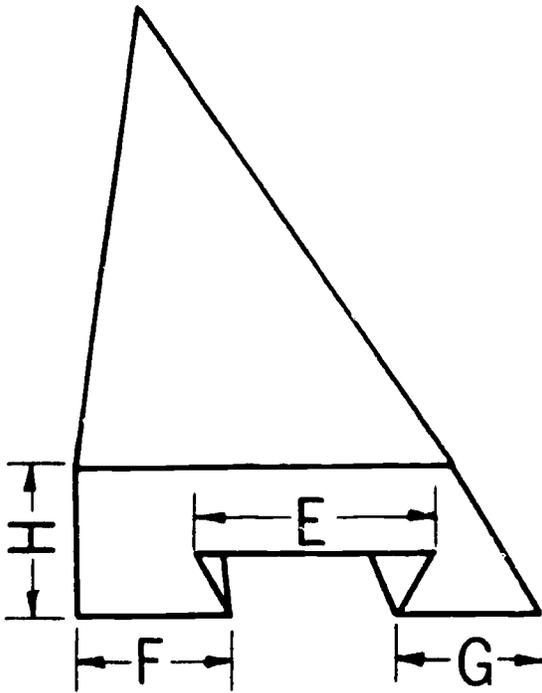
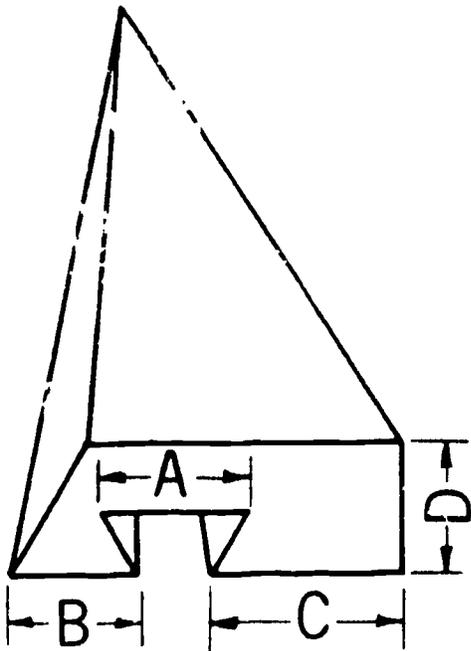
LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

LINE J IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 6



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

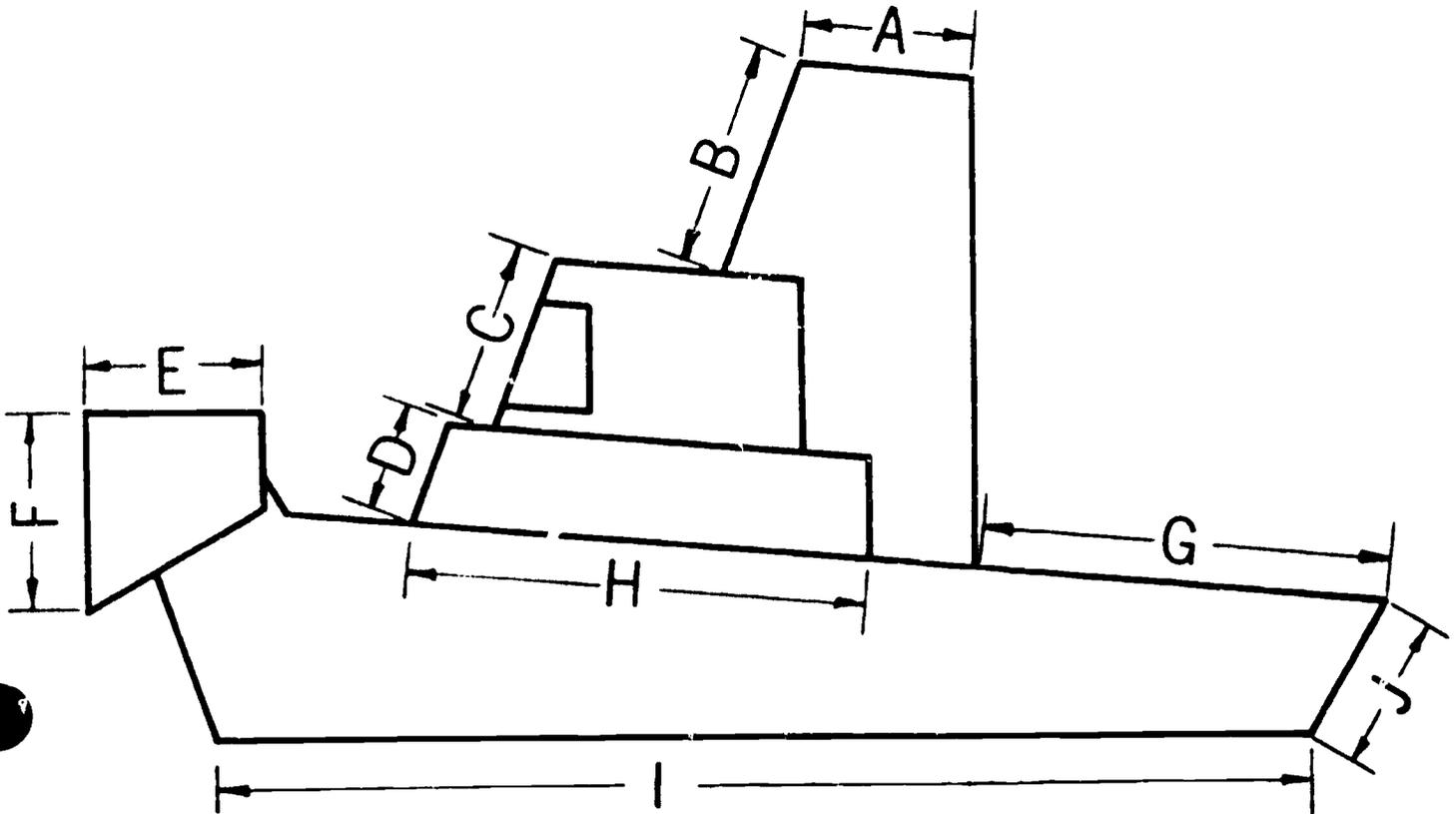
LINE C IS ?

LINE H IS ?

LINE D IS ?

LINE E IS ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 7



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

LINE H IS _____ ?

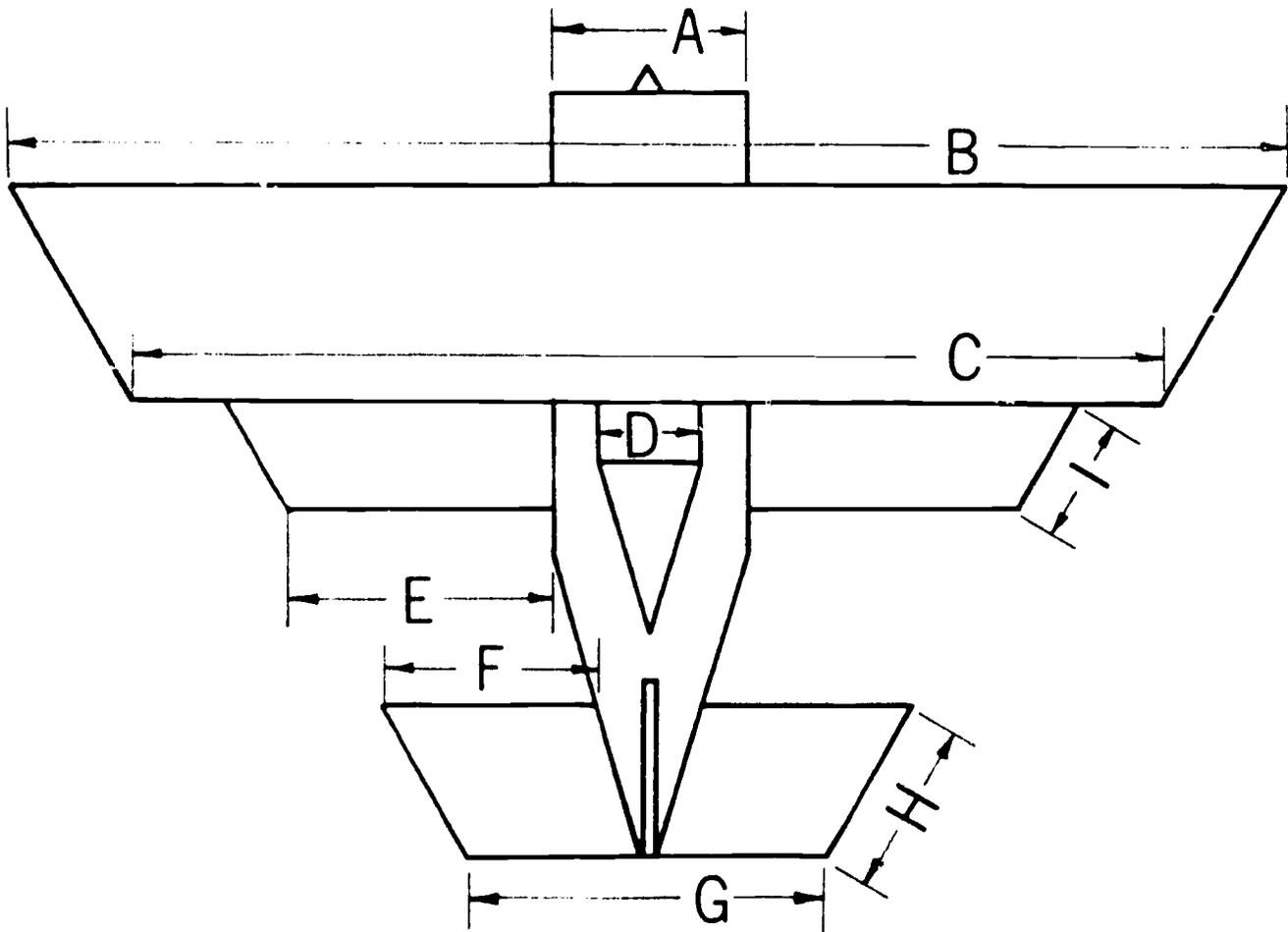
LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

LINE J IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 8



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS ?

LINE F IS ?

LINE B IS ?

LINE G IS ?

LINE C IS ?

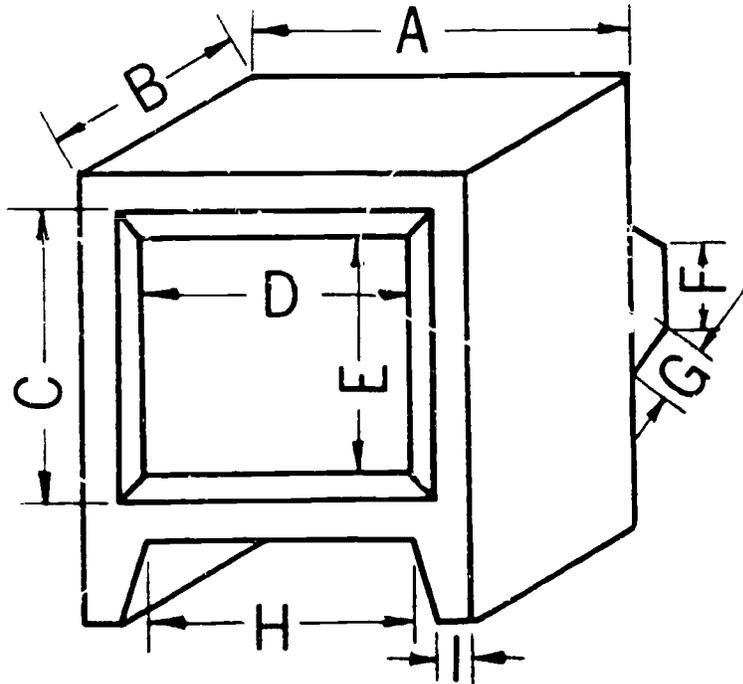
LINE H IS ?

LINE D IS ?

LINE I IS ?

LINE E IS ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 9



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

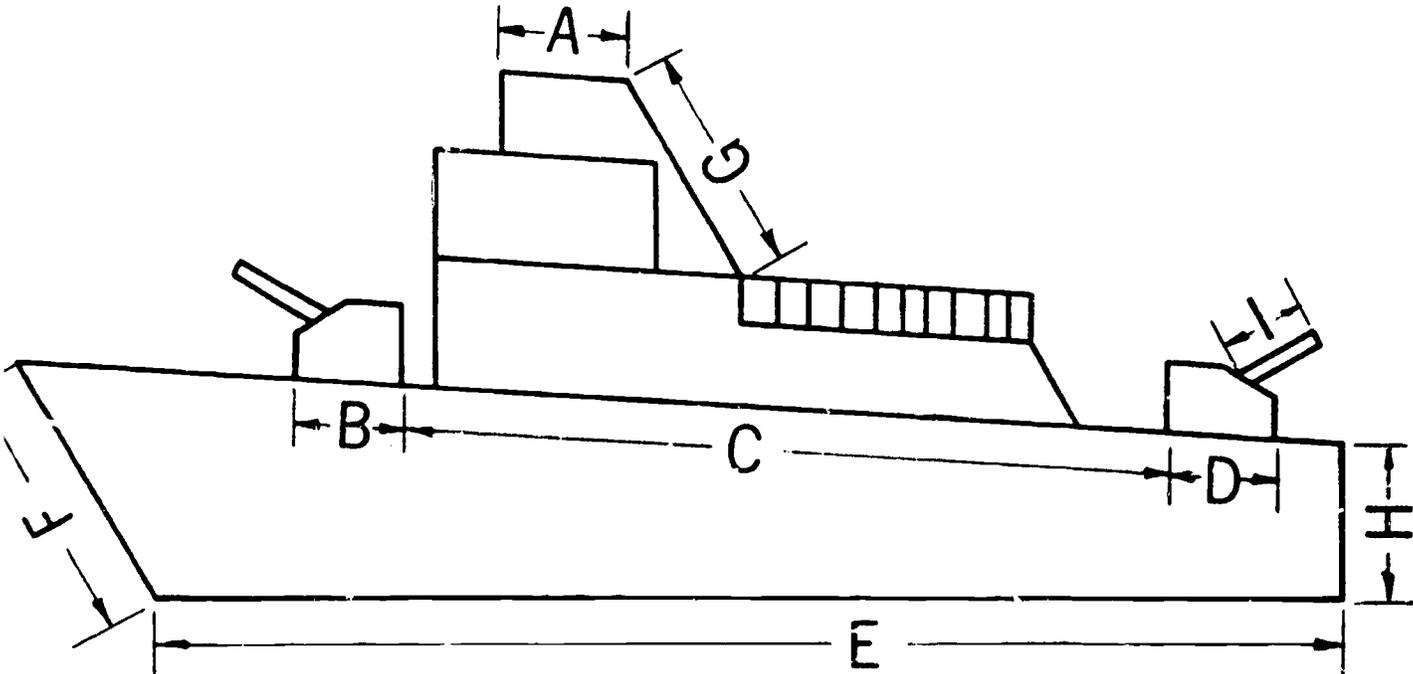
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 10



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____ ?

LINE F IS _____ ?

LINE B IS _____ ?

LINE G IS _____ ?

LINE C IS _____ ?

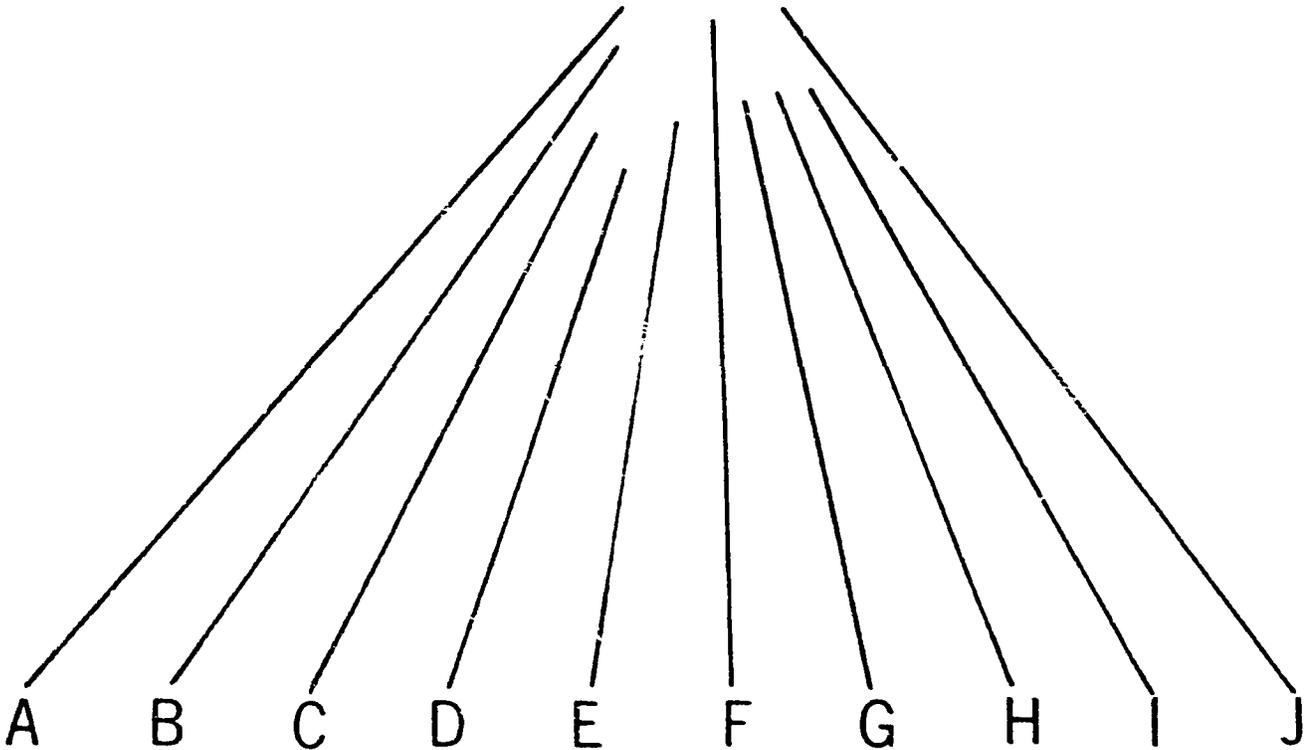
LINE H IS _____ ?

LINE D IS _____ ?

LINE I IS _____ ?

LINE E IS _____ ?

SIXTEENTH INCH MEASUREMENT
EXERCISE NO. 11



INSTRUCTIONS: MEASURE THE LINES SHOWN AND WRITE ANSWERS BELOW.

LINE A IS _____?

LINE F IS _____?

LINE B IS _____?

LINE G IS _____?

LINE C IS _____?

LINE H IS _____?

LINE D IS _____?

LINE I IS _____?

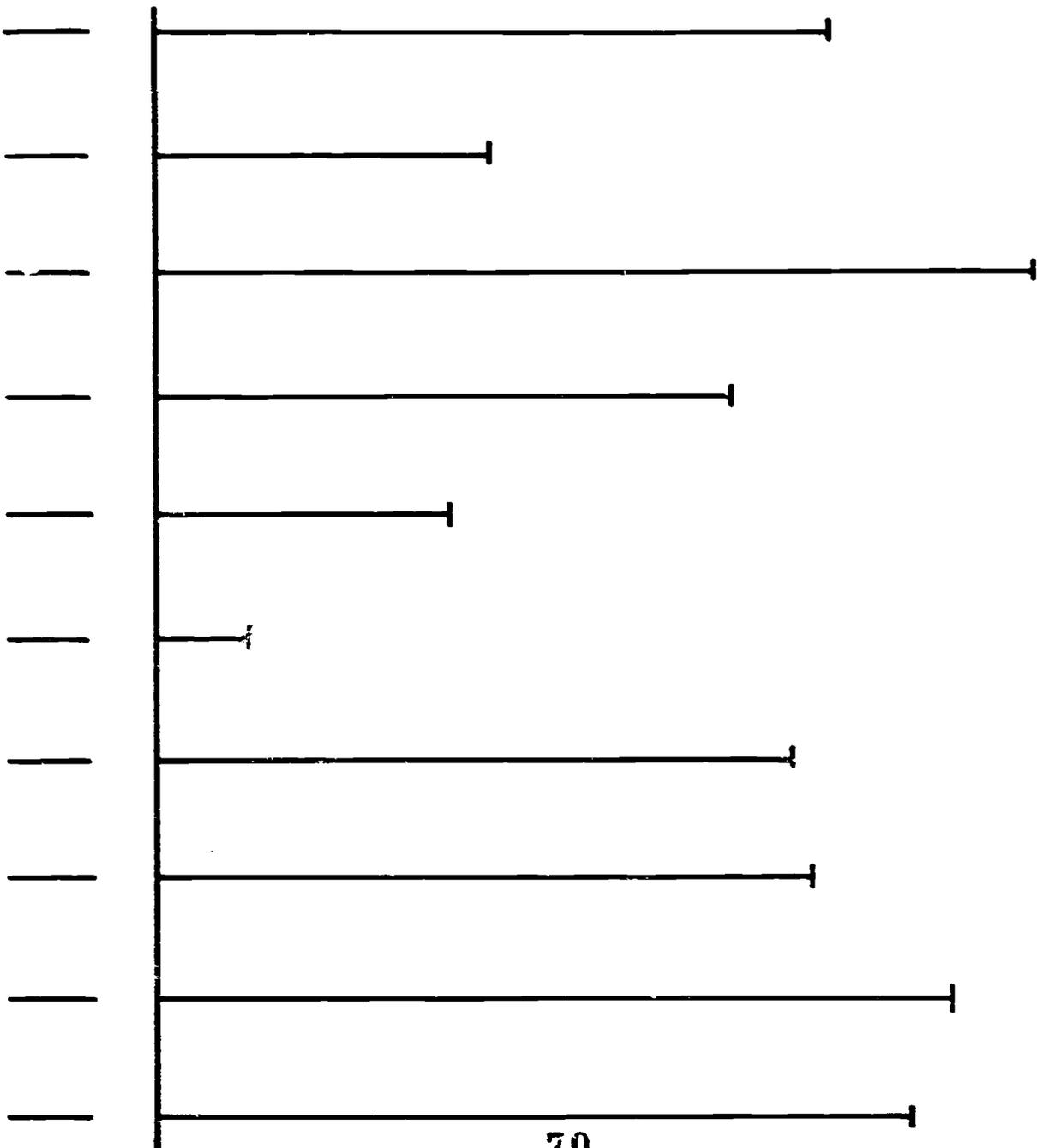
LINE E IS _____?

LINE J IS _____?

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

BEGIN MEASURING AT LINE



70

MEASURE LINES AND MARK ANSWERS

MARK
ANSWER
HERE

BEGIN MEASURING AT LINE

