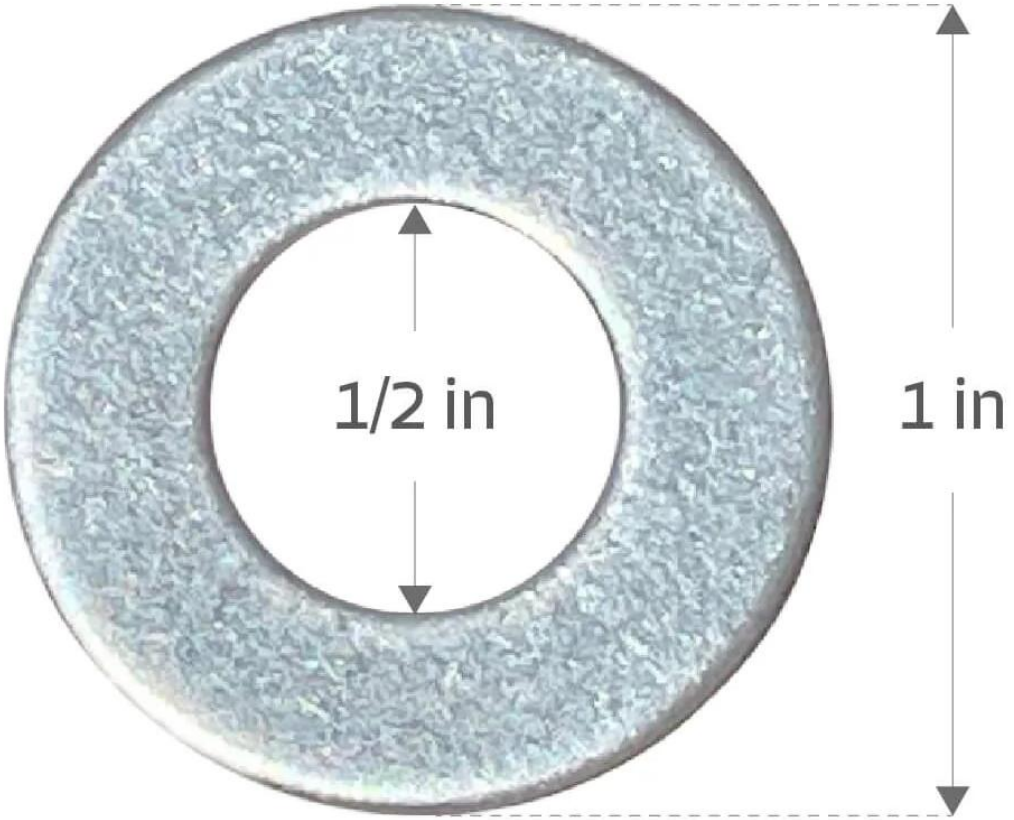
Ag. Tech. Mechanics Problem Solving #1

What is the inside radius of the washer?

A. ¼ in
B.½ in
C.1 in
D.1 ½ in



Ag. Tech. Mechanics Problem Solving #2

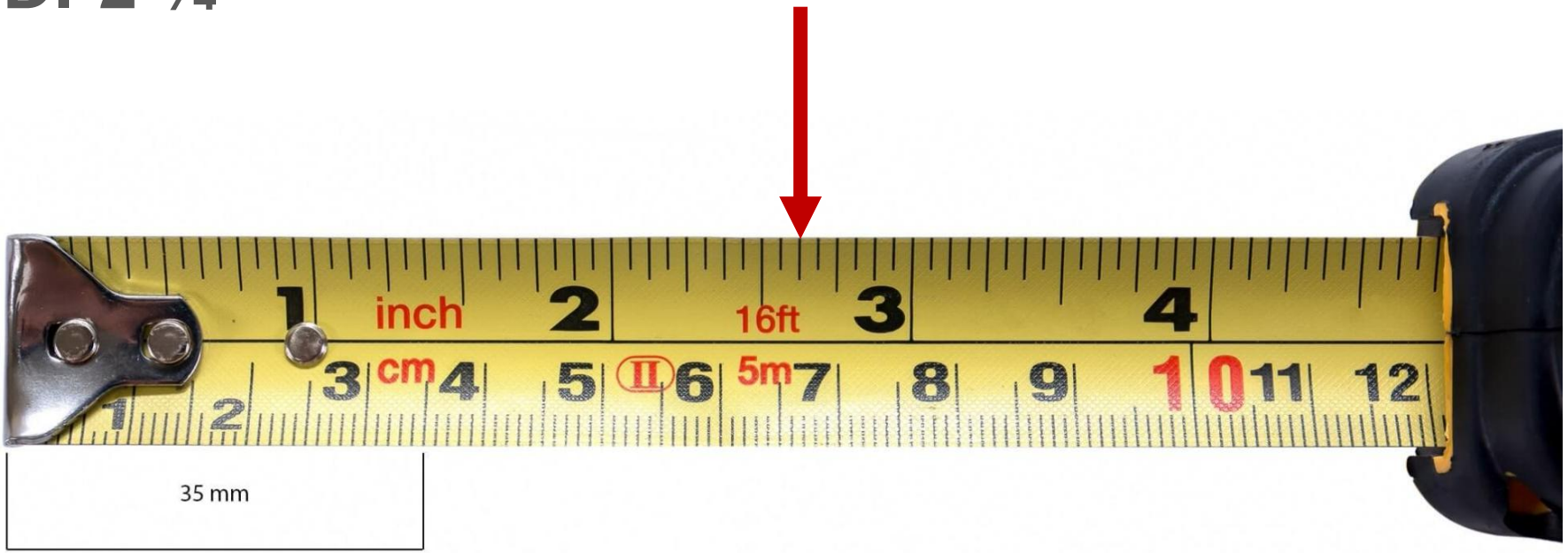
Divide the length of this board into thirds. How long is each section?

A. 4”
B. 6”
C. 9”
D. 12”

Ag. Tech. Mechanics Problem Solving #3

What measurement is pictured on the steel tape?

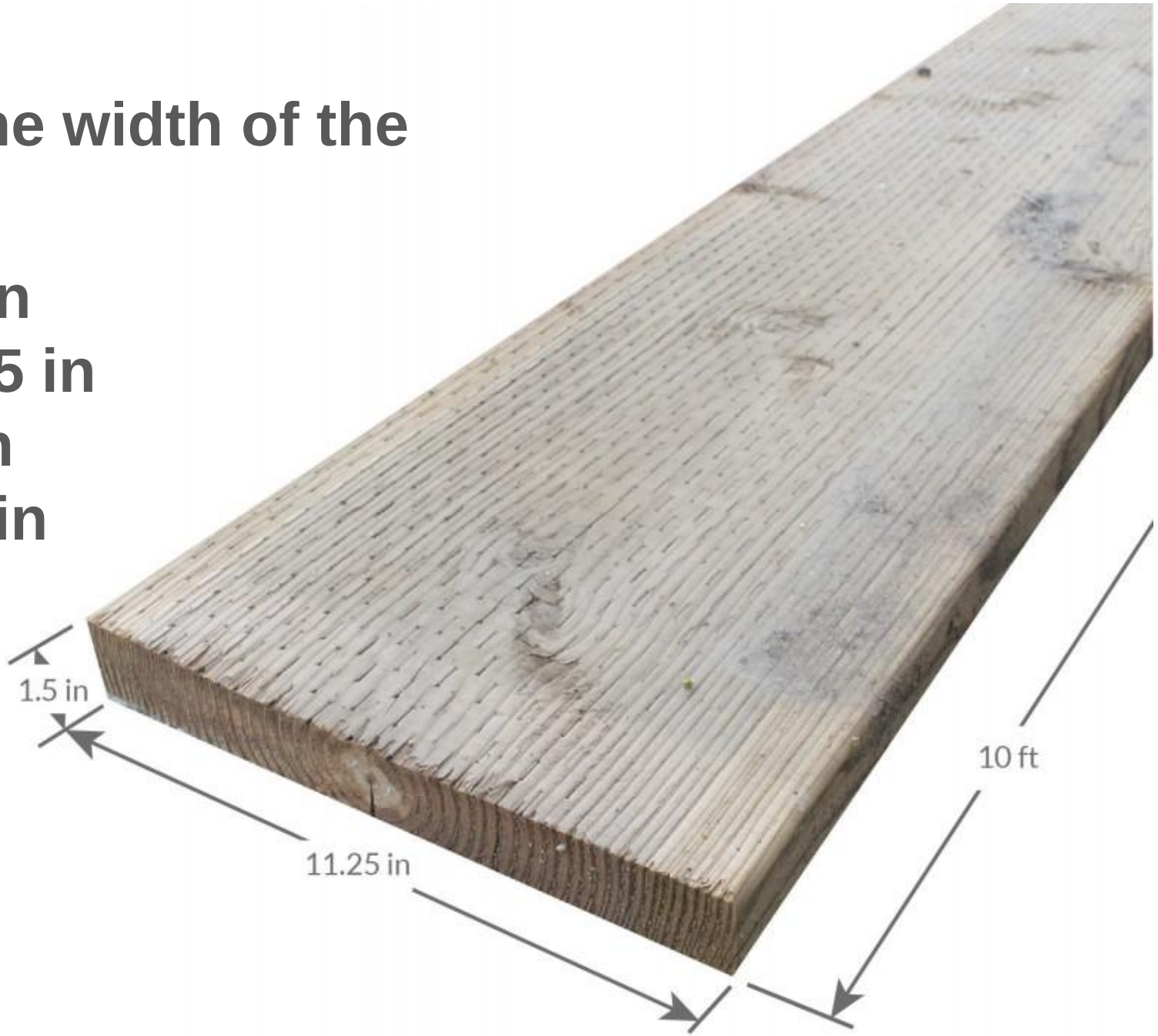
A. 2 ¼”
B. 2 ½”
C. 2 5/8”
D. 2 ¾”



Ag. Tech. Mechanics Problem Solving #4

What is the width of the board?

A. 1.5 in
B. 11.25 in
C. 10 in
D. 120 in

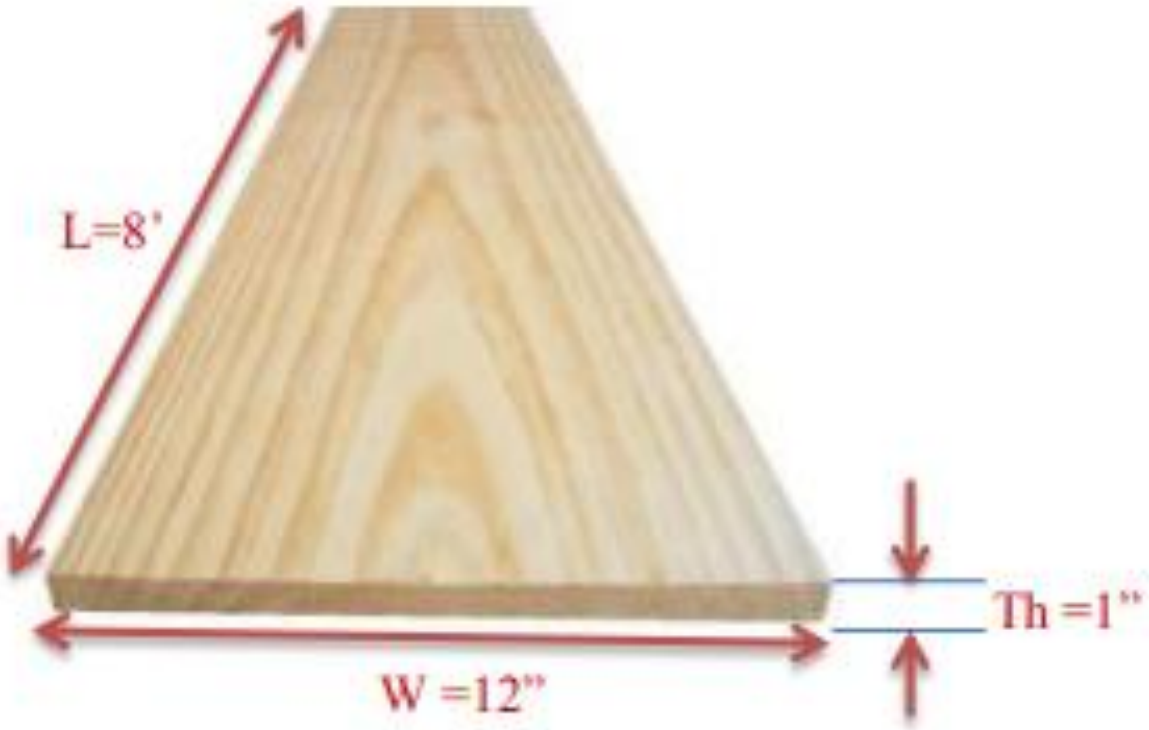


Ag. Tech. Mechanics Problem Solving #5

Calculate the number of board feet in a board that is 1”x12”x8’

(Hint: BF = thickness in inches x width in inches x length in feet / 12)

A. 128 BF
B. 8 BF
C. 1536 BF
D. 2 BF



Ag. Tech. Mechanics Problem Solving #6

To make this from one board, how long must the board be?

A. 2 ft
B. 3 ft
C. 4 ft
D. 5 ft

Ag. Tech. Mechanics Problem Solving #7

This shop scene is safe for all involved.

A. True
B. False

Ag. Tech. Mechanics Problem Solving #8

Which tool would be used with a bit brace?

A.

C.

B.

D.

Ag. Tech. Mechanics Problem Solving #9

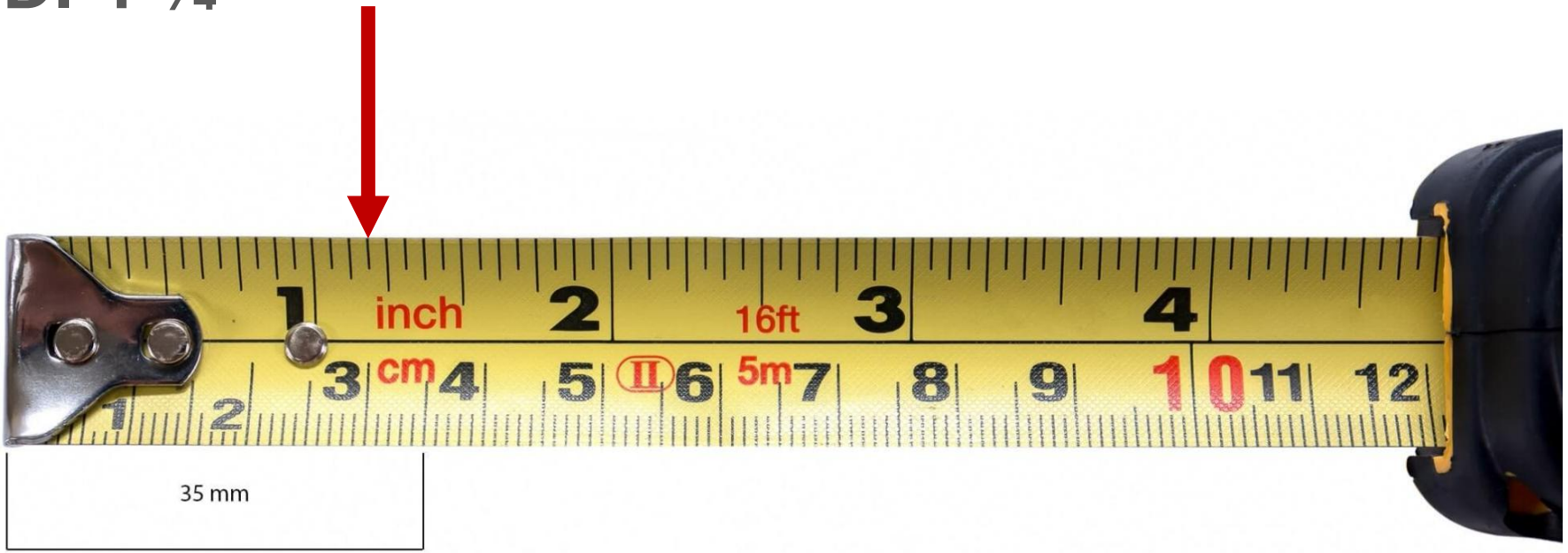
Is this board square?

A. Yes
B. No

Ag. Tech. Mechanics Problem Solving #10

What measurement is pictured on the steel tape?

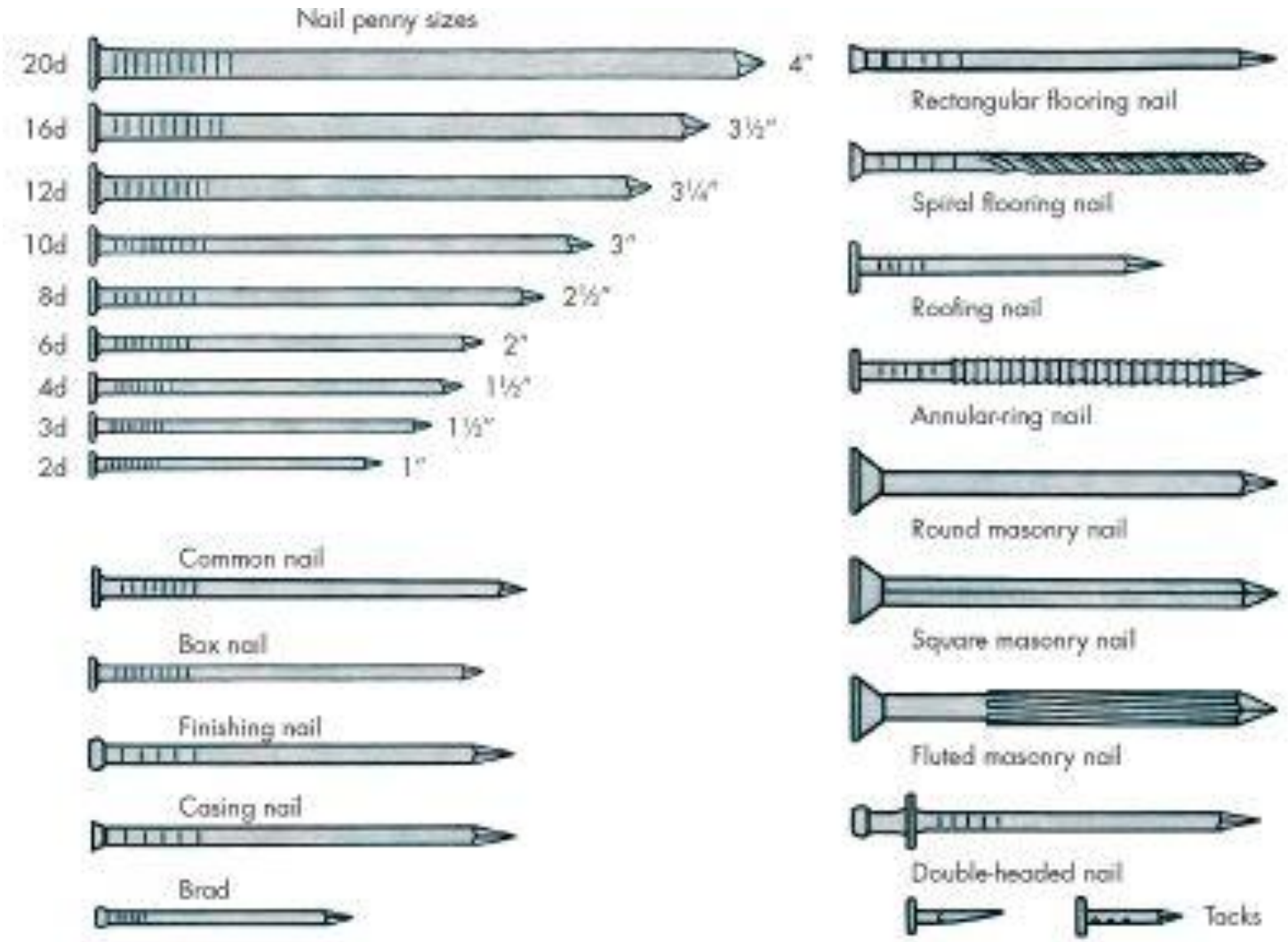
A. 1 3/8”
B. 1 3/16”
C. 1 ¾”
D. 1 ¼”



Ag. Tech. Mechanics Problem Solving #11

What is the length of an 8 penny nail?

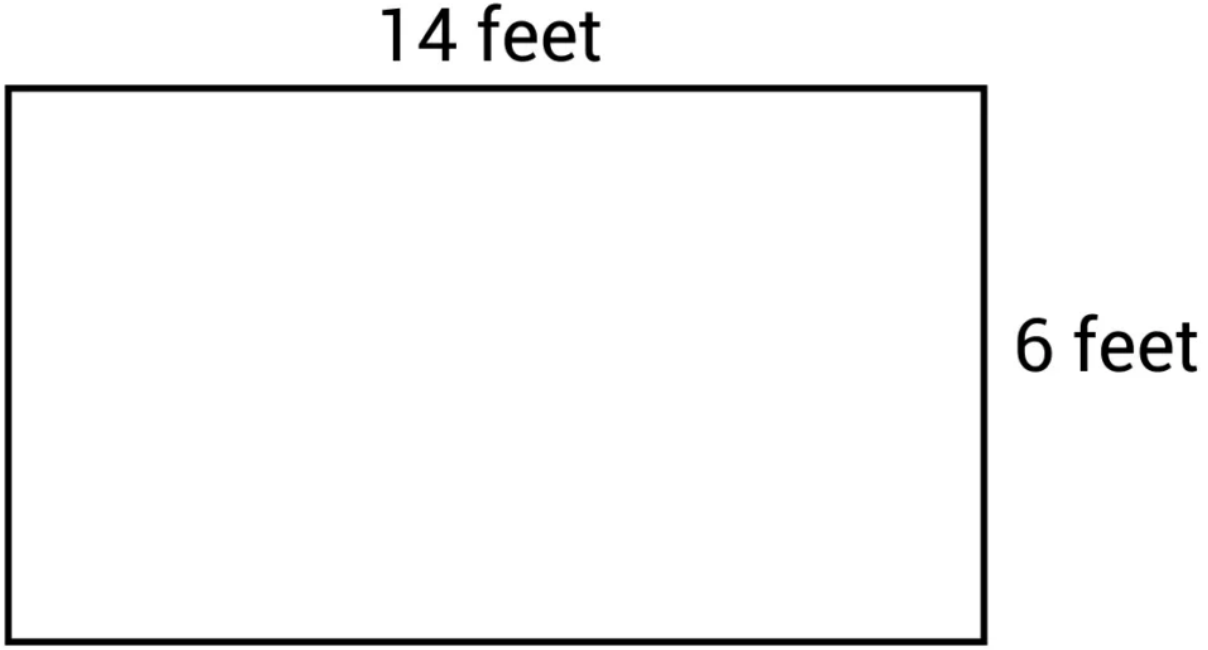
A. 1 ½”
B. 2”
C. 2 ½”
D. 3 ½”



Ag. Tech. Mechanics Problem Solving #12

One quart of paint covers 100 square feet. How many quarts are needed to paint two coats on the sign outlined below.

A. 1
B. 2
C. 3
D. 4



Ag. Tech. Mechanics Problem Solving #13

If the paint required for question #12 costs $23.98, how much is the total cost for paint?

A. **$11.99**
B. **$23.98**
C. **$47.96**
D. **$71.94**

Ag. Tech. Mechanics Problem Solving #14

Which fastener is used with the tool pictured:

A

B

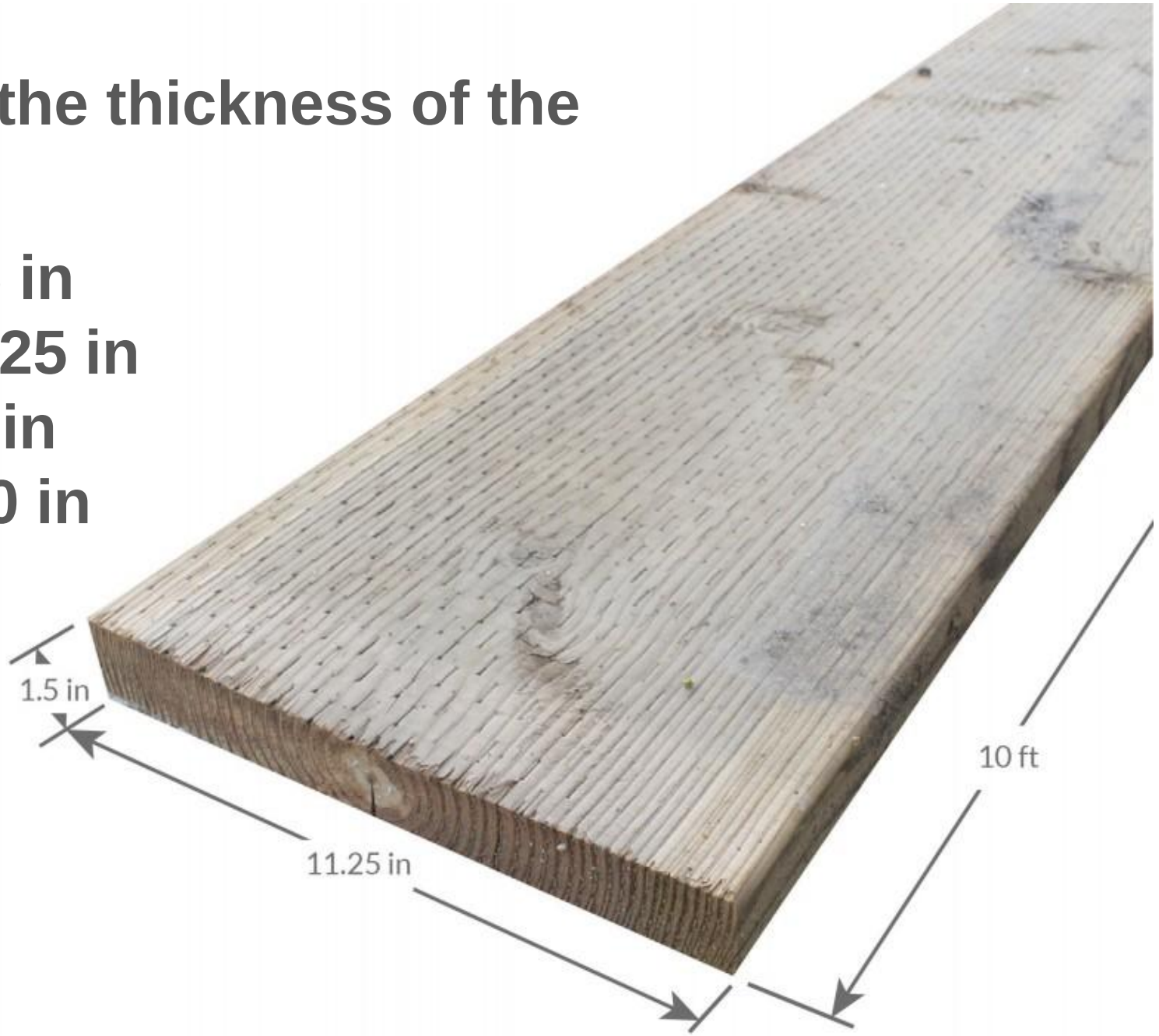
C

D

Ag. Tech. Mechanics Problem Solving #15

What is the thickness of the board?

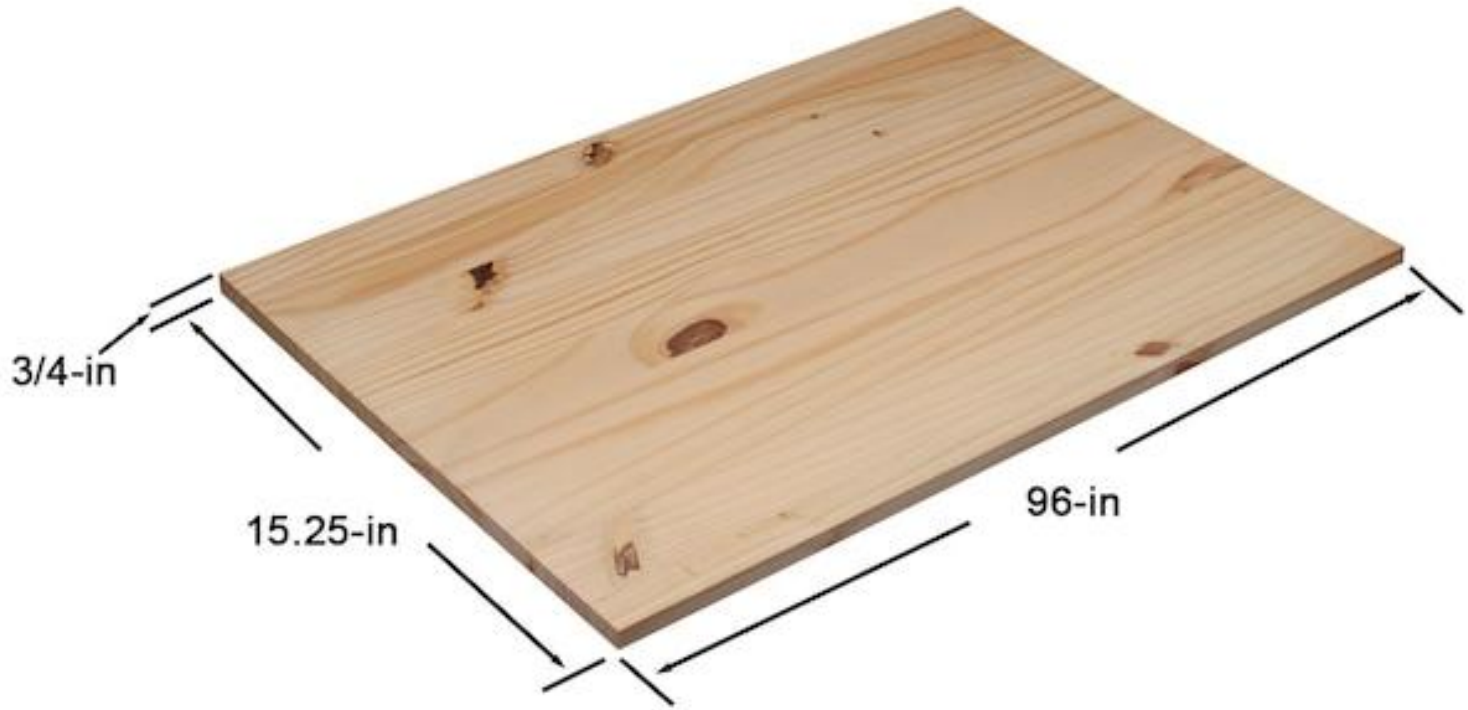
A. 1.5 in
B. 11.25 in
C. 10 in
D. 120 in



Ag. Tech. Mechanics Problem Solving #16

If you need to cut this board in half, how long is each piece?

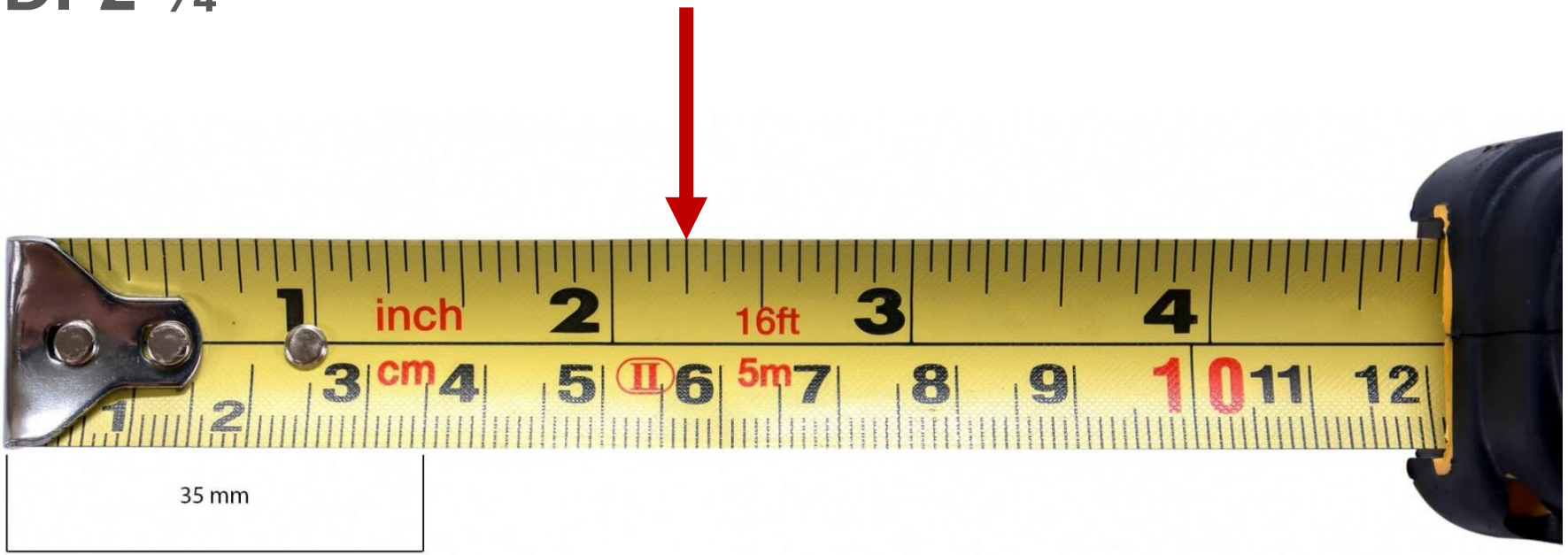
A. 2 ft.
B. 4 ft.
C. 8 ft.
D. 16 ft.



Ag. Tech. Mechanics Problem Solving #17

What measurement is pictured on the steel tape?

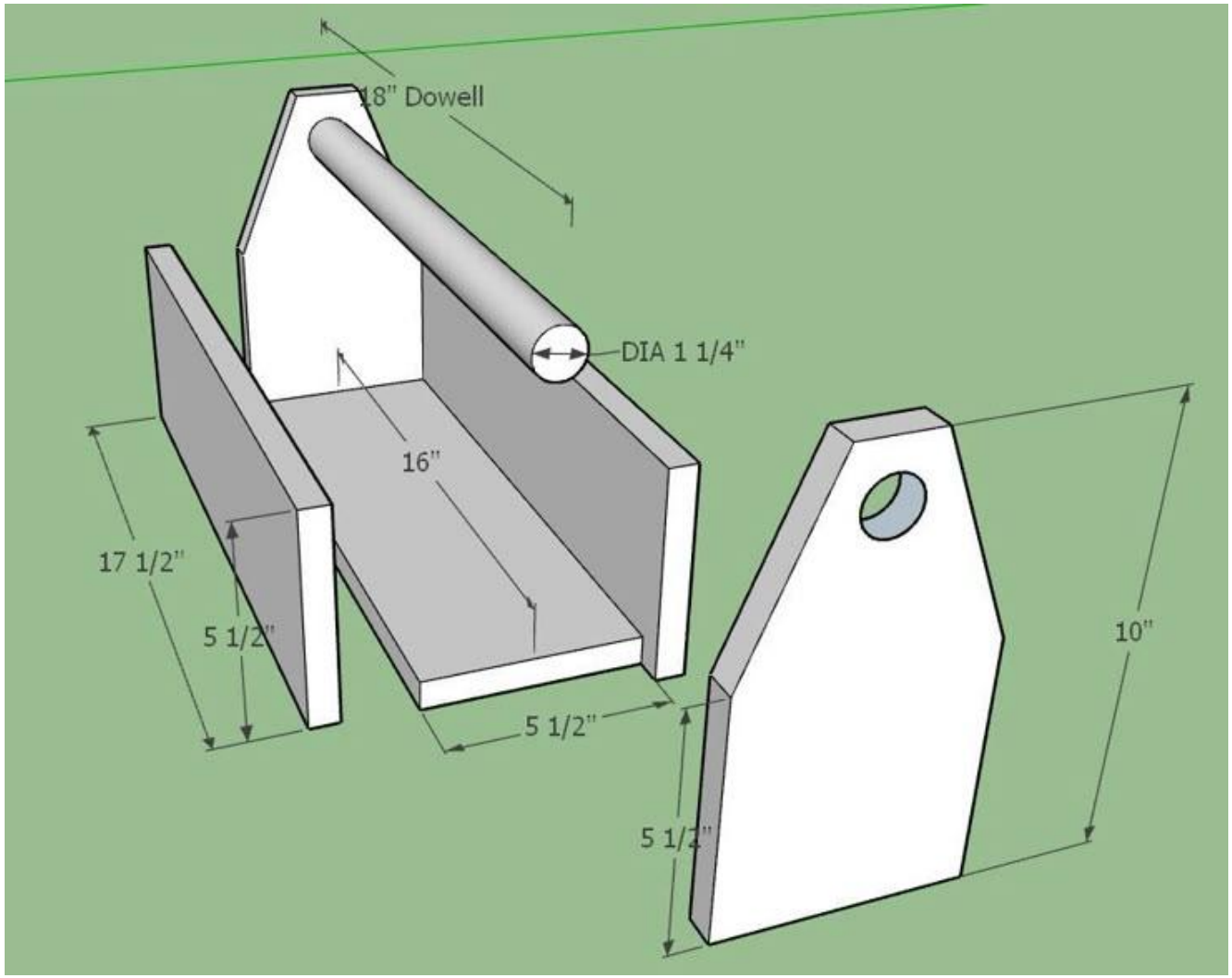
A. 2 ¼”
B. 2 ½”
C. 2 5/8”
D. 2 ¾”



Ag. Tech. Mechanics Problem Solving #18

What size dowel is needed for this project?

A. ¼ in x 16”
B. 1 ¼” x 18”
C.1” x 17 ½”
D. 1 ¼” x 16”



Ag. Tech. Mechanics Problem Solving #19

What is the width of the board?

A. 1 ¾”
B. 1/2”
C. 3 ½”
D. 4”

Ag. Tech. Mechanics Problem Solving #20

Calculate the board feet of 24 pieces of boards each measuring 2”x4”x16’

(Hint: BF = thickness in inches x width in inches x length / 12)

A. 64 BF
B. 128 BF
C. 256 BF
D. 10.68 BF