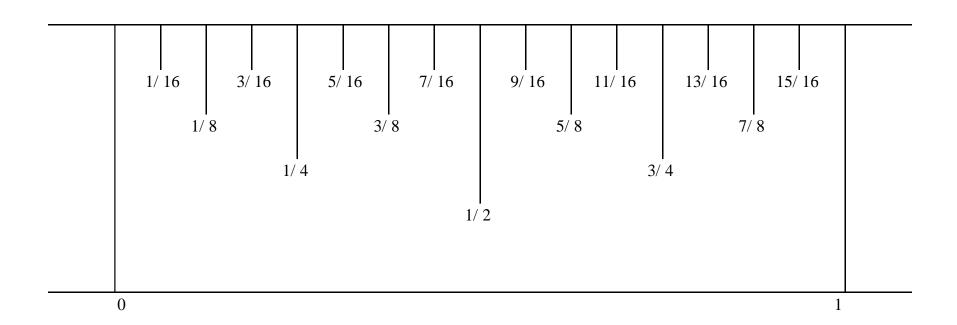
HOW TO READ A TAPE MEASURE



THE "COMPLETE" FULL INCH MARK

NOTE THAT THE TOP NUMBER (NUMERATOR) IS ALWAYS ODD.

(1, 3, 5, 7, 9, 11, 13, 15)

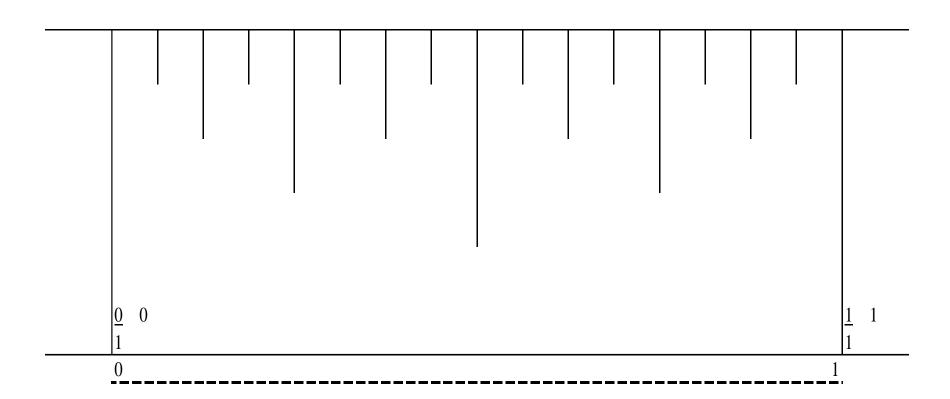
NOTE THAT THE BOTTOM NUMBER (DENOMINATOR) IS ALWAYS EVEN.

(2, 4, 8, 16)

 It is vitally important that each of you are very proficient in reading a tape measure or rule.

 We will now break the markings down into logical groups so that you can understand the pattern that makes reading the tape measure easy.

HOW TO READ THE ONE-INCH (1) MARK

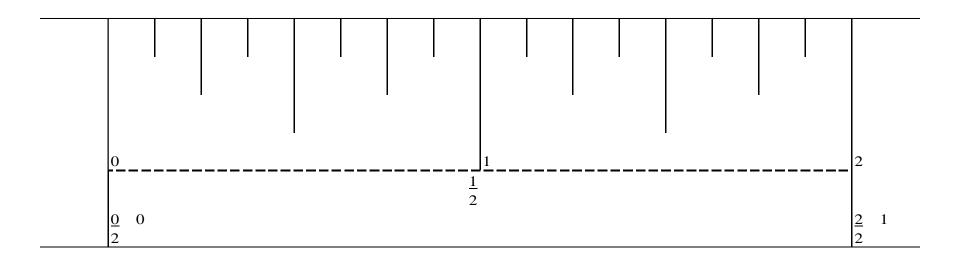


THE ONE INCH MARK

THE FULL INCH MARKS ARE THE LONGEST.

NOTE THAT THEY EXTEND ALL THE WAY ACROSS THE TAPE'S FACE.

HOW TO READ THE HALF-INCH (1/2) MARK



THE HALF INCH MARK

THE HALF INCH MARK IS THE NEXT LONGEST.

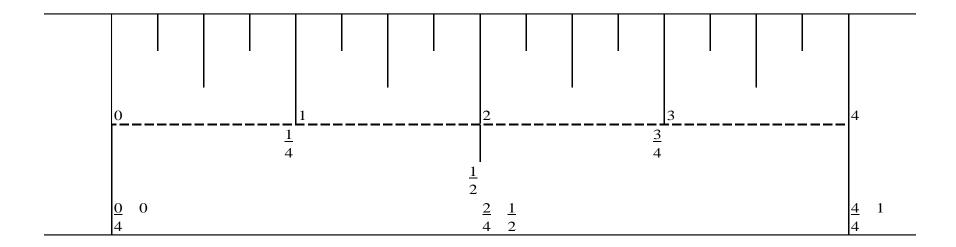
THIS IS THE LONGEST MARK THAT DOES NOT EXTEND ALL THE WAY ACROSS THE TAPE.

STARTING WITH ZERO (0);

COUNT THE MARKS THAT CROSS THE DASHED LINE.

- 0 DIVIDED BY 2 EQUALS 0.
- 1 DIVIDED BY 2 EQUALS 1/2.
- 2 DIVIDED BY 2 EQUALS 1.

HOW TO READ THE QUARTER-INCH (1/4) MARKS



THE QUARTER INCH MARKS

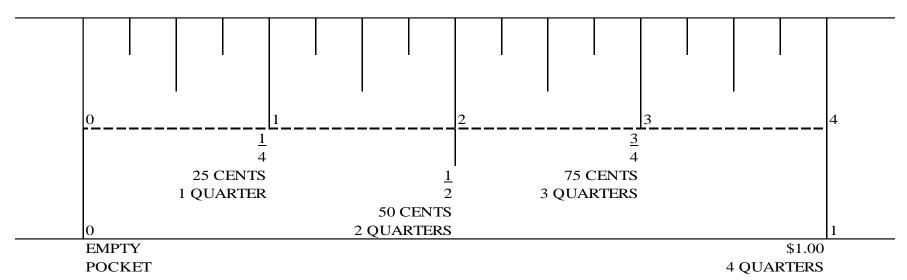
THE QUARTER INCH MARK IS THE NEXT LONGEST.
THE QUARTER INCH MARK IS JUST SHORTER THAN THE HALF MARK.

STARTING WITH ZERO (0);

COUNT THE MARKS THAT CROSS THE DASHED LINE.

- 0 DIVIDED BY 4 EQUALS 0.
- 1 DIVIDED BY 4 EQUALS 1/4.
- 2 DIVIDED BY 4 EQUALS 1/2.
- 3 DIVIDED BY 4 EQUALS 3/4.
- 4 DIVIDED BY 4 EQUALS 1.

QUARTER-INCH (1/4) MARKS – ANOTHER APPROACH



THE QUARTER INCH MARKS

THE QUARTER INCH MARK IS THE NEXT LONGEST.
THE QUARTER INCH MARK IS JUST SHORTER THAN THE HALF MARK.

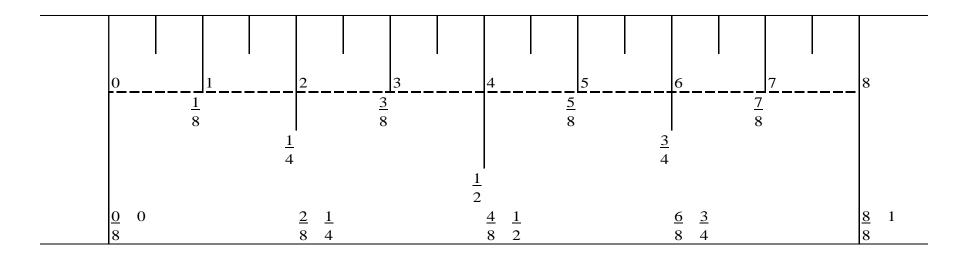
STARTING WITH ZERO (0);

COUNT THE MARKS THAT CROSS THE DASHED LINE.

(NOTE THAT YOU COUNT THE LINES OF THE SAME LENGTH AND THOSE LONGER.)

0 DIVIDED BY 4 EQUALS 0. \$0.00
1 DIVIDED BY 4 EQUALS 1/4. \$0.25
2 DIVIDED BY 4 EQUALS 1/2. \$0.50
3 DIVIDED BY 4 EQUALS 3/4. \$0.75
4 DIVIDED BY 4 EQUALS 1. \$1.00

HOW TO READ THE EIGHTH-INCH (1/8) MARKS



THE EIGHTH INCH MARKS

THE EIGHTH INCH MARK IS THE NEXT LONGEST.
THE EIGHTH INCH MARK IS JUST SHORTER THAN THE QUARTER MARK.

STARTING WITH ZERO (0);

COUNT THE MARKS THAT CROSS THE DASHED LINE.

- 0 DIVIDED BY 8 EQUALS 0.
- 1 DIVIDED BY 8 EQUALS 1/8.
- 2 DIVIDED BY 8 EQUALS 2/8 EQUALS 1/4.
- 3 DIVIDED BY 8 EQUALS 3/8.
- 4 DIVIDED BY 8 EQUALS 4/8 EQUALS 1/2.

- 5 DIVIDED BY 8 EQUALS 5/8.
- 6 DIVIDED BY 8 EQUALS 6/8 EQUALS 3/4.
- 7 DIVIDED BY 8 EQUALS 7/8.
- 8 DIVIDED BY 8 EQUALS 1.

HOW TO READ THE SIXTEENTH-INCH (1/16) MARKS

01_	2 3	4 5	57	8 9	10 11	12 13	14 15	16
1 16	$\frac{3}{16}$	5 16	7 16	<u>9</u> 16	11 16	13 16	15 16	
	1/8	<u>3</u>		<u>5</u> 8		<u>7</u> 8	<u>-</u>	
	<u>1</u>	 - 		O .	<u>3</u>			
	4	t	1 1		4			
<u>o</u> o	<u>2</u> <u>1</u>	<u>4</u> <u>1</u> <u>6</u>	2 <u>5</u> <u>3</u>	<u>8</u> <u>1</u>	<u>10</u> <u>5</u>	<u>12</u> <u>3</u>	1 <u>4</u> <u>7</u>	<u>16</u> 1
16	16 8	16 4	16 8	16 2	16 8	16 4	16 8	16

THE SIXTEENTH INCH MARKS

THE SIXTEENTH INCH MARKS ARE THE SHORTEST.
THE SIXTEENTH INCH MARK IS JUST SHORTER THAN THE EIGHTH MARK.

STARTING WITH ZERO (0);

COUNT THE MARKS THAT CROSS THE DASHED LINE.

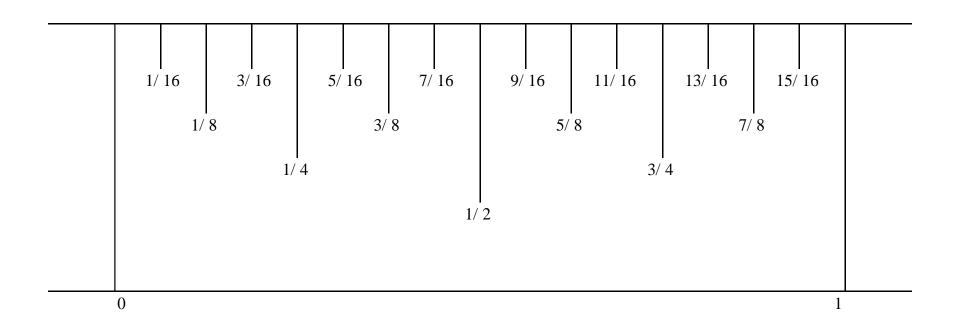
- 0 DIVIDED BY 16 EQUALS 0.
- 1 DIVIDED BY 16 EQUALS 1/16.
- 2 DIVIDED BY 16 EQUALS 2/16 EQUALS 1/8.
- 3 DIVIDED BY 16 EQUALS 3/16.
- 4 DIVIDED BY 16 EQUALS 4/16 EQUALS 1/4.
- 5 DIVIDED BY 16 EQUALS 5/16.
- 6 DIVIDED BY 16 EQUALS 6/16 EQUALS 3/8.
- 7 DIVIDED BY 16 EQUALS 7/16.
- 8 DIVIDED BY 16 EQUALS 8/16 EQUALS 1/2.

- 9 DIVIDED BY 16 EQUALS 9/16.
- 10 DIVIDED BY 16 EQUALS 10/16 EQUALS 5/8.
- 11 DIVIDED BY 16 EQUALS 11/16.
- 12 DIVIDED BY 16 EQUALS 12/16 EQUALS 3/4.
- 13 DIVIDED BY 16 EQUALS 13/16.
- 14 DIVIDED BY 16 EQUALS 14/16 EQUALS 7/8.
- 15 DIVIDED BY 16 EQUALS 15/16.
- 16 DIVIDED BY 16 EQUALS 1.

THE TAPE MEASURE - PUTTING IT ALL TOGETHER

- We have studied each marking group.
 - The one-inch mark
 - The half-inch mark
 - The quarter-inch marks
 - The eighth-inch marks
 - The sixteenth-inch marks

Now let's work on it all together.



THE "COMPLETE" FULL INCH MARK

NOTE THAT THE TOP NUMBER (NUMERATOR) IS ALWAYS ODD.

(1, 3, 5, 7, 9, 11, 13, 15)

NOTE THAT THE BOTTOM NUMBER (DENOMINATOR) IS ALWAYS EVEN.

(2, 4, 8, 16)

Read the Tape Measure markings from left to right:

Read the Tape Measure markings from right to left:

 It is important that you can read the Tape Measure forward and backwards.

• Example:

- The reading is 13/16".
 - You could count 13 marks from left to right (forward)
 - Or
 - You could quickly count from right to left (backwards) "15/16", "7/8", "13/16". So much easier.

- Learning this scale opens up a multitude of other understandings.
- This is the same scale for:
 - Combination, Open-End, and Box-End Wrenches
 - Hex-Head (Allen) Wrenches
 - Bolts and Nuts
 - Tap and Die Sets (for threading)
 - Even most pipe and structural steel shapes follow this fractional scale to some degree.