Measure Drill

PRINTABLE + FILLABLE PDF WORKBOOK

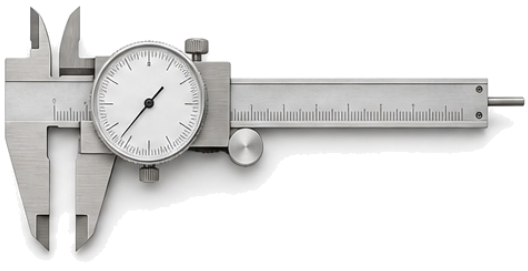
Micrometer and Caliper Workbook

Labeled parts, how to measure, and step by step reading for every precision tool in the shop.

62 pages | US Letter + A4 | Answer keys

- Micrometers: 0.001", vernier 0.0001", 1 to 2" and metric
- Vernier and dial calipers, plus dial indicators
- 97 practice readings, 38 of them extra drills, plus a timed test







Updated November 2026 · Plain English · Every answer checked

Free sample · The full workbook has every page

START HERE

What is inside

Work through it in order. Each Learn page shows the idea in pictures, then the Practice pages that follow give you readings to try. Check yourself with the answer key at the back.

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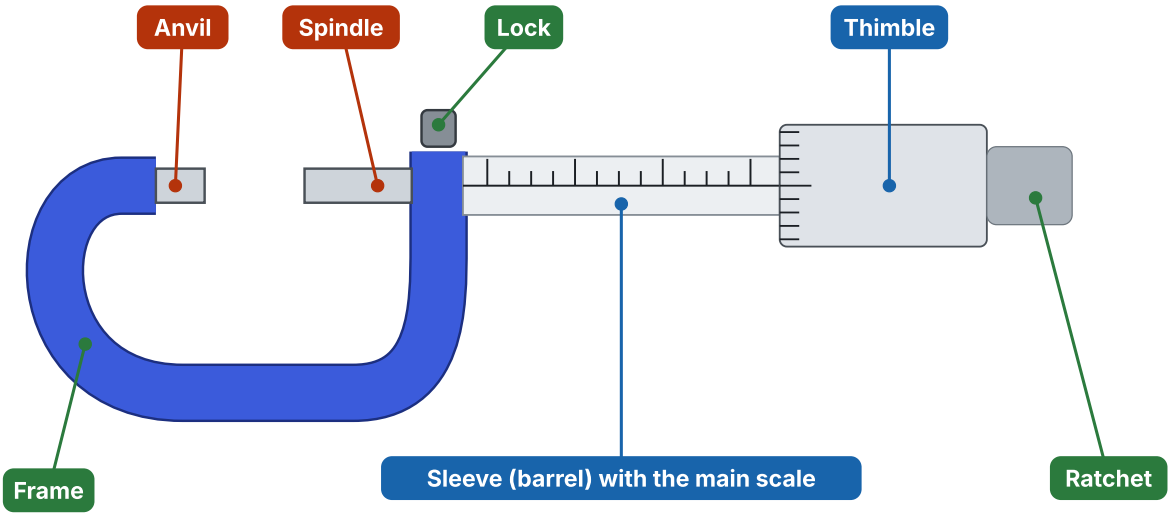
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MICROMETERS · STEP 1

Know the parts



An outside micrometer with every part labeled.

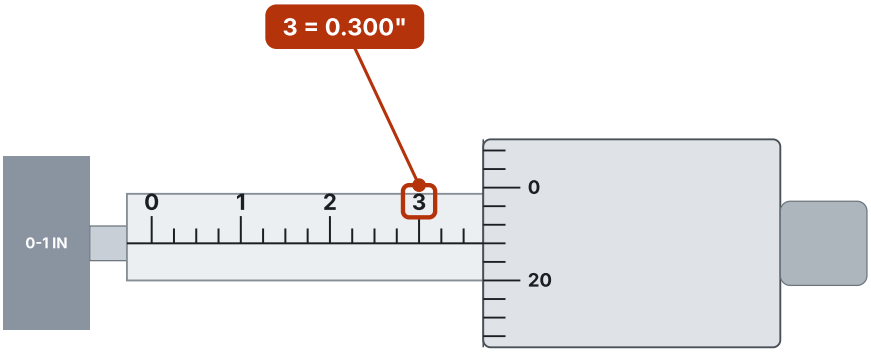
The C shaped **frame** holds a fixed **anvil** on one side. The **spindle** moves in and out when you turn the **thimble**. The **sleeve** (also called the barrel) carries the main scale and a long reference line. The **ratchet** on the end slips at a set force, so every measurement is taken with the same pressure. The **lock** holds the spindle still.

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MICROMETERS · STEP 3

Read the sleeve

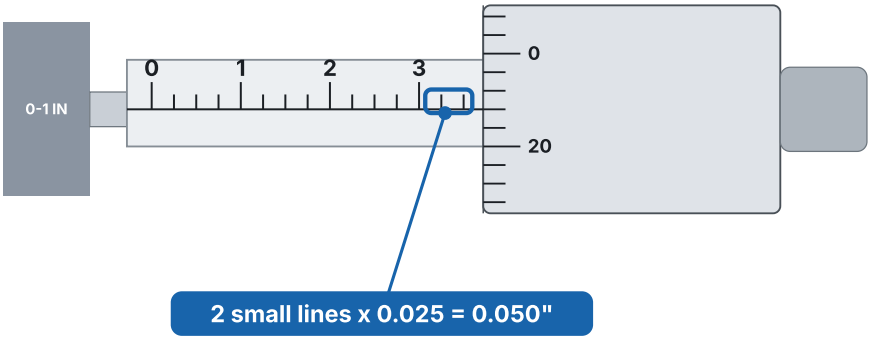
1. The last number showing



The last number you can see is 3, so 0.300".

Each number on the sleeve is **0.100"**. Find the last number the thimble edge has uncovered.

2. The small lines after it



Two small lines show after the 3: 2 × 0.025 = 0.050".

Between two numbers there are three small lines, each **0.025"** (one full turn of the thimble). A line hidden under the thimble edge does not count yet.

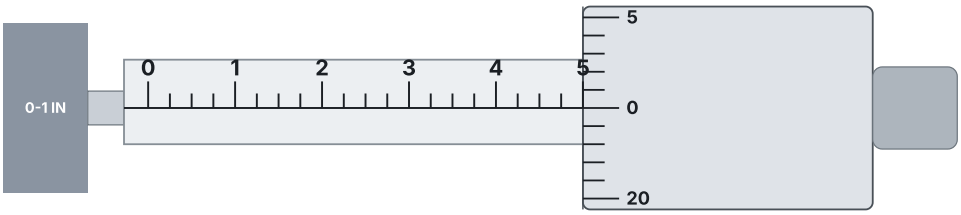
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PRACTICE M1

Inch micrometers

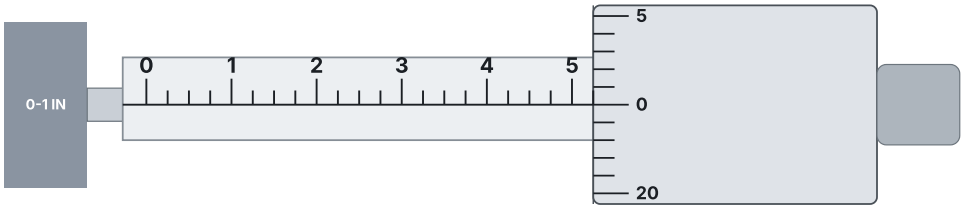
The first three land on a thimble line of 0, 0.025, 0.050 or 0.075. Then every thousandth is fair game.

1



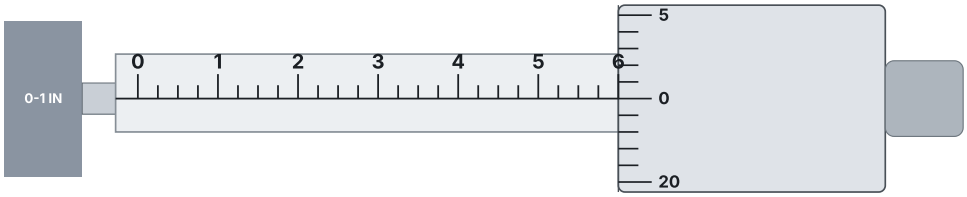
READING

2



READING

3



READING

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