

IE-352

Section 1, CRN: 48700/1/2

Section 2, CRN: 48703/4/5

Section 3, CRN: 48706/7/8

Second Semester 1434-35 H (Spring-2014) – 4(4,1,2)

“MANUFACTURING PROCESSES – 2”

Sunday, February 23, 2014 (23/04/1435H)

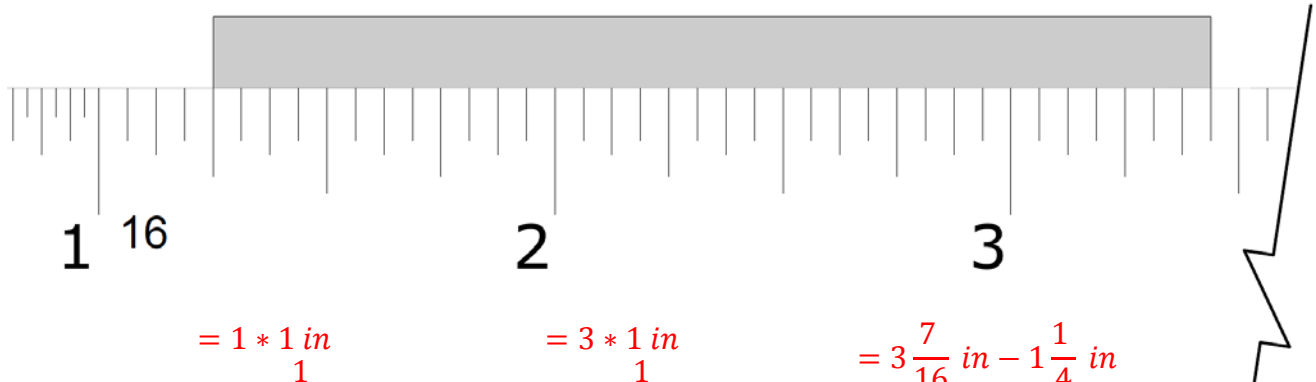
Quiz 2 ANSWERS

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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PART – I (8 points; 2 points each)

Read the following gages and write the values in the provided box.

1.



$$\begin{aligned}
 &= 1 * 1 \text{ in} \\
 &+ 4 * \frac{1}{16} \text{ in} \\
 &= 1 \frac{1}{4} \text{ in}
 \end{aligned}$$

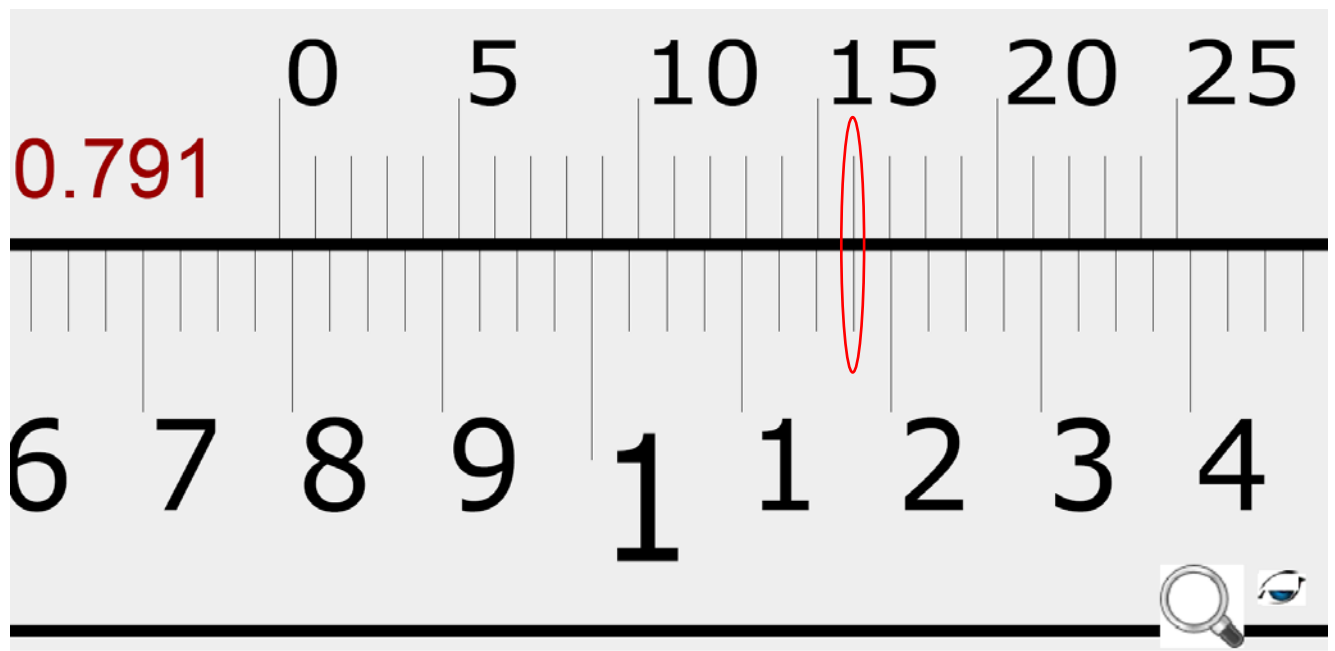
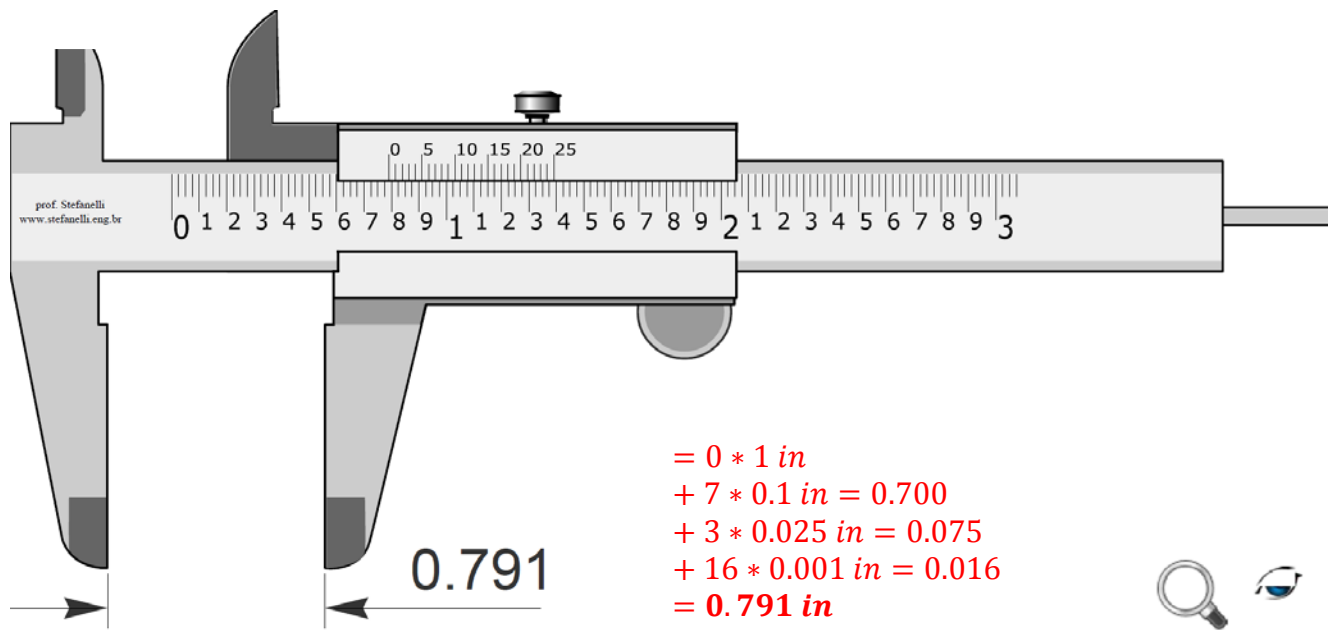
$$\begin{aligned}
 &= 3 * 1 \text{ in} \\
 &+ 7 * \frac{1}{16} \text{ in} \\
 &= 3 \frac{7}{16} \text{ in}
 \end{aligned}$$

$$\begin{aligned}
 &= 3 \frac{7}{16} \text{ in} - 1 \frac{1}{4} \text{ in} \\
 &= 3 \frac{7}{16} \text{ in} - 1 \frac{4}{16} \text{ in} \\
 &= 2 \frac{3}{16} \text{ in}
 \end{aligned}$$

Q1. ANSWER:

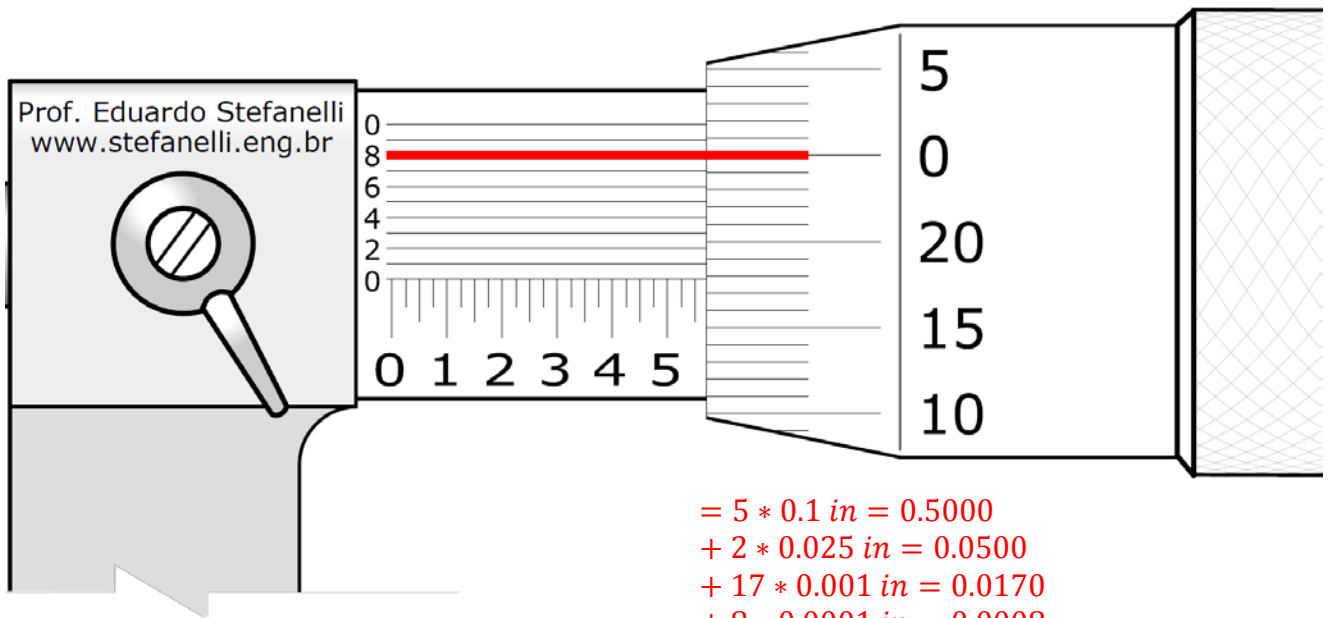
$2 \frac{3}{16} \text{ in}$

2.

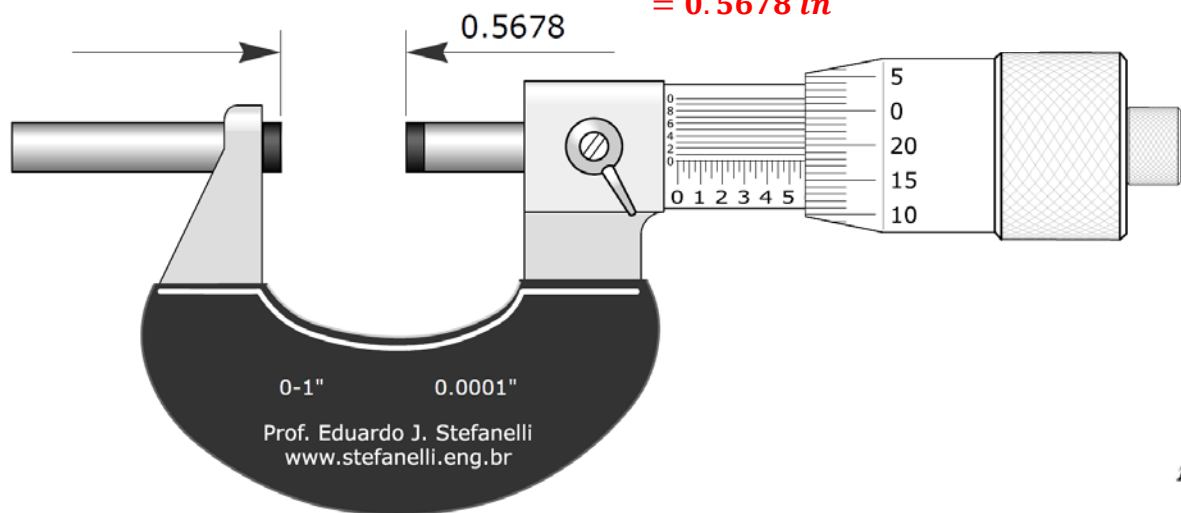


Q2. ANSWER: **0.791 in**

3.

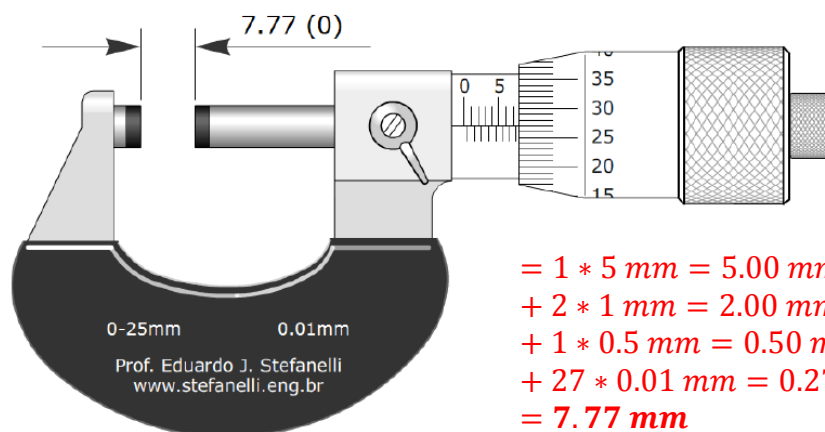
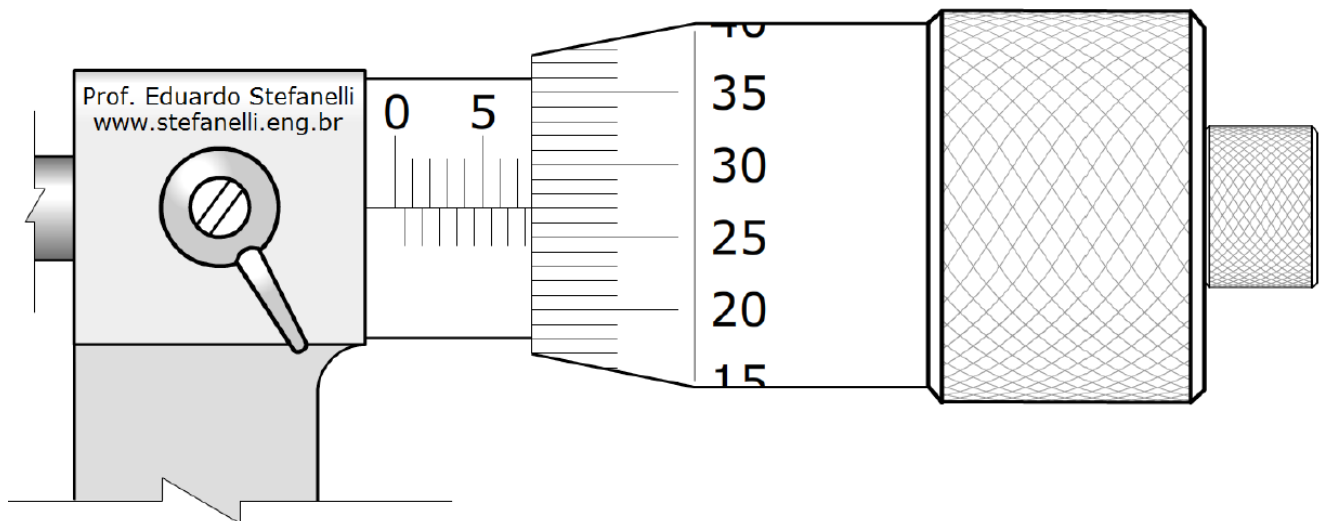


$$\begin{aligned}
 &= 5 * 0.1 \text{ in} = 0.5000 \\
 &+ 2 * 0.025 \text{ in} = 0.0500 \\
 &+ 17 * 0.001 \text{ in} = 0.0170 \\
 &+ 8 * 0.0001 \text{ in} = 0.0008 \\
 &= \mathbf{0.5678 \text{ in}}
 \end{aligned}$$



Q3. ANSWER: **0.5678 in**

4.



$$\begin{aligned}
 &= 1 * 5 \text{ mm} = 5.00 \text{ mm} \\
 &+ 2 * 1 \text{ mm} = 2.00 \text{ mm} \\
 &+ 1 * 0.5 \text{ mm} = 0.50 \text{ mm} \\
 &+ 27 * 0.01 \text{ mm} = 0.27 \text{ mm} \\
 &= 7.77 \text{ mm}
 \end{aligned}$$

Q4. ANSWER: **7.77 mm**

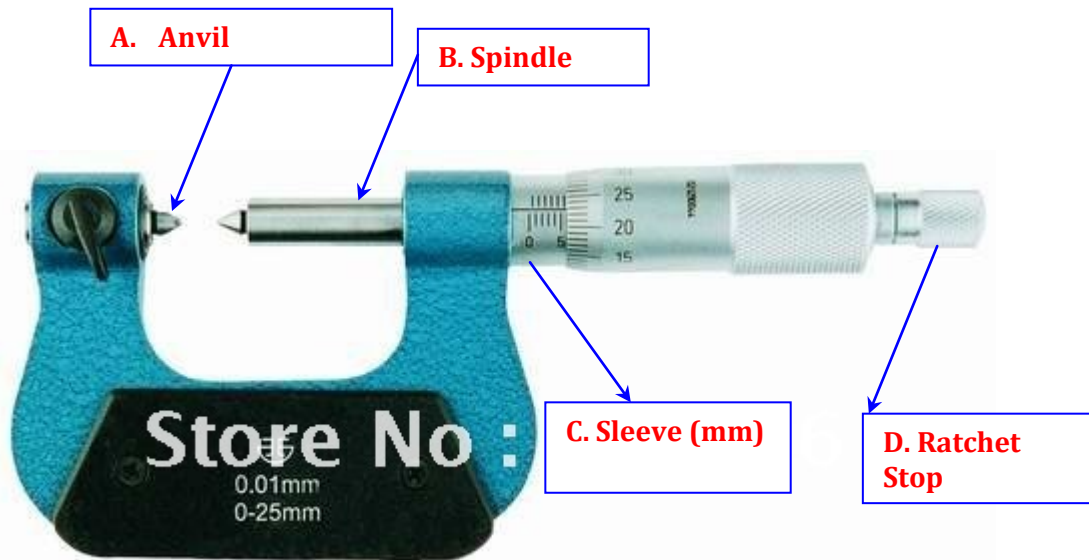
PART – II (2 points)

Label the following gage properly at the letters shown.

a) What is the name of the gage shown below? [1 point]

Screw-thread micrometer

b) Label the following gage properly at the letters shown. [$\frac{1}{4}$ -point each]



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Second Semester 1434-35 H (Spring-2014) – 4(4,1,2)

“MANUFACTURING PROCESSES – 2”

Monday, February 24, 2014 (24/04/1435H)

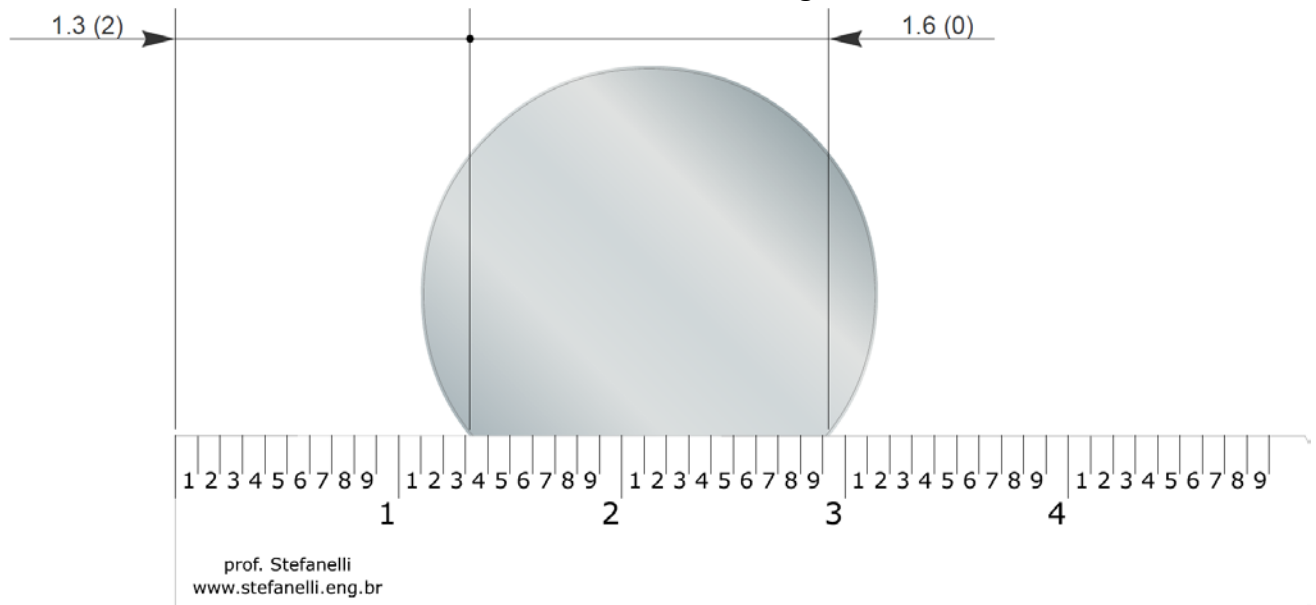
Quiz 2 **ANSWERS**

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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PART – I (8 points; 2 points each)

Read the following gages and write the values in the provided box.

1. Find the distance between the two vertical lines on the right.



$$\begin{aligned}
 &= 1 * 1 \text{ in} \\
 &+ 3 * 0.1 \text{ in} \\
 &= 1.3 \text{ in}
 \end{aligned}$$

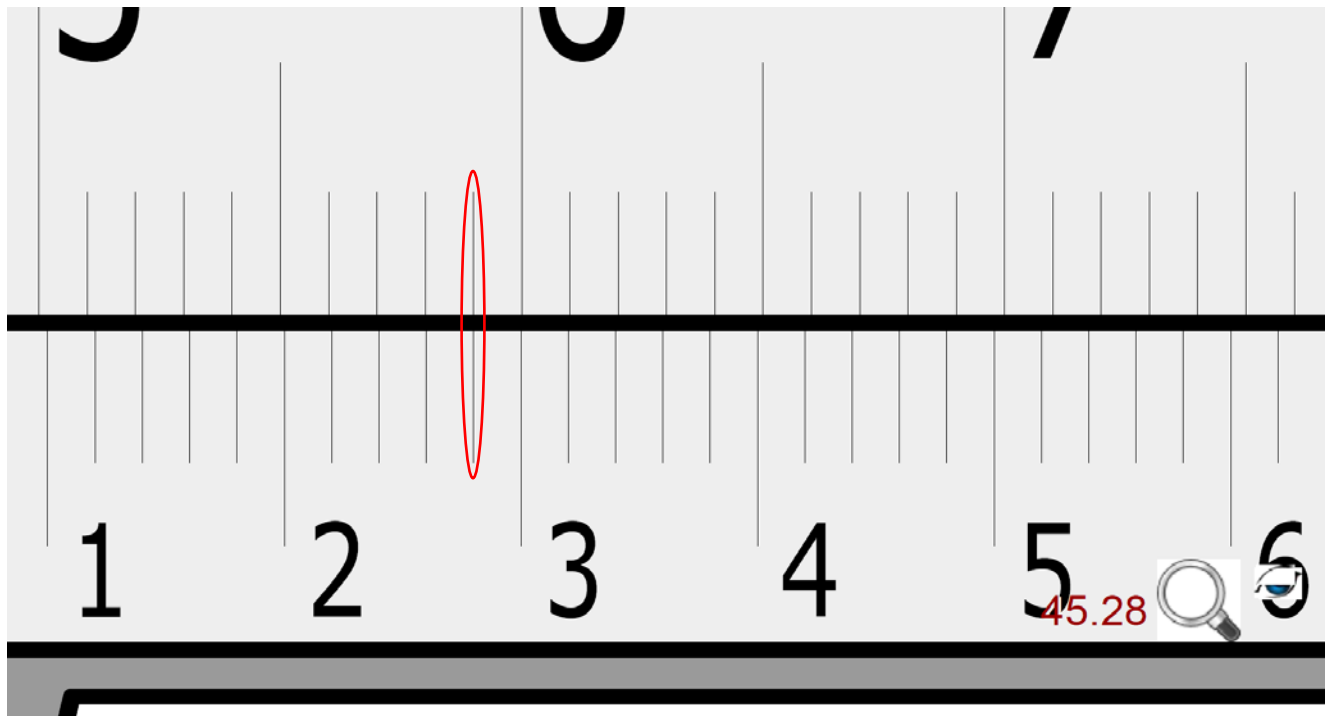
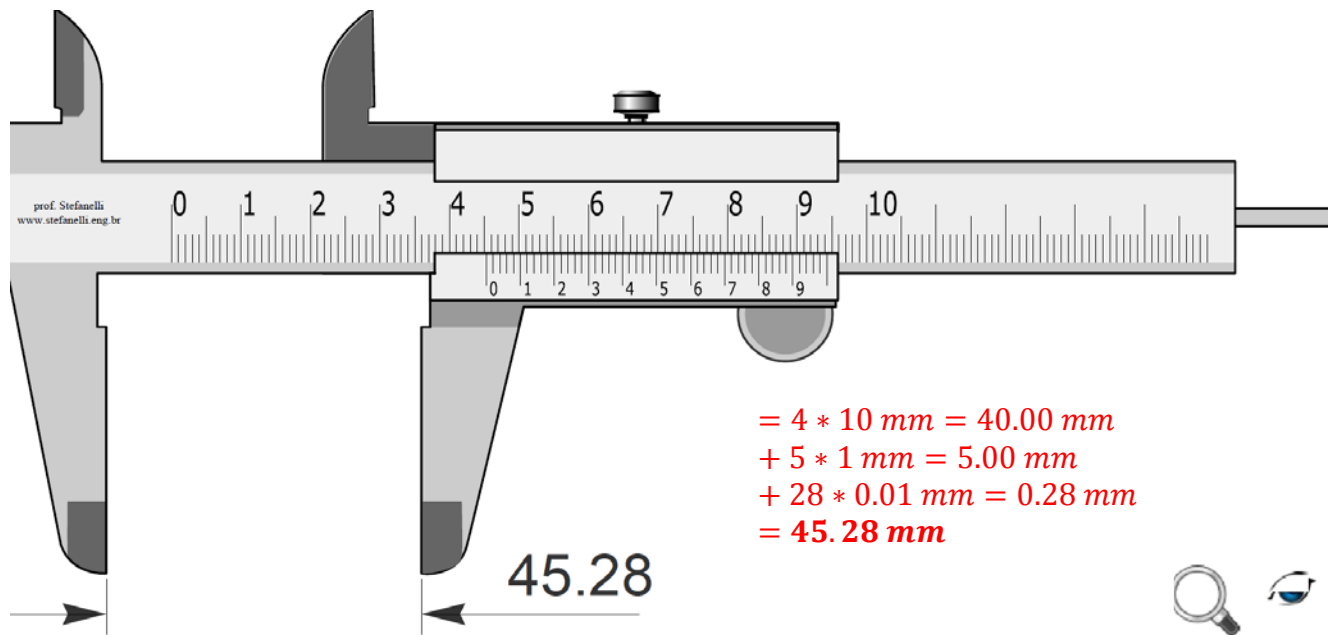
$$\begin{aligned}
 &= 2 * 1 \text{ in} \\
 &+ 9 * 0.1 \text{ in} \\
 &= 2.9 \text{ in}
 \end{aligned}$$

$$\begin{aligned}
 &= 2.9 \text{ in} - 1.3 \text{ in} \\
 &= 1.6 \text{ in}
 \end{aligned}$$

Q1. ANSWER:

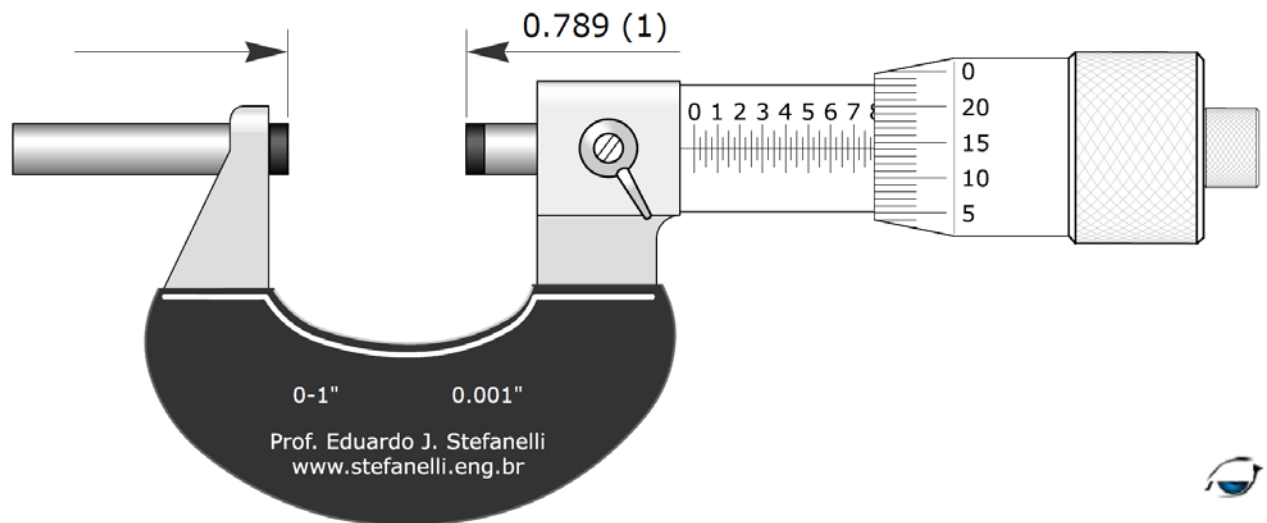
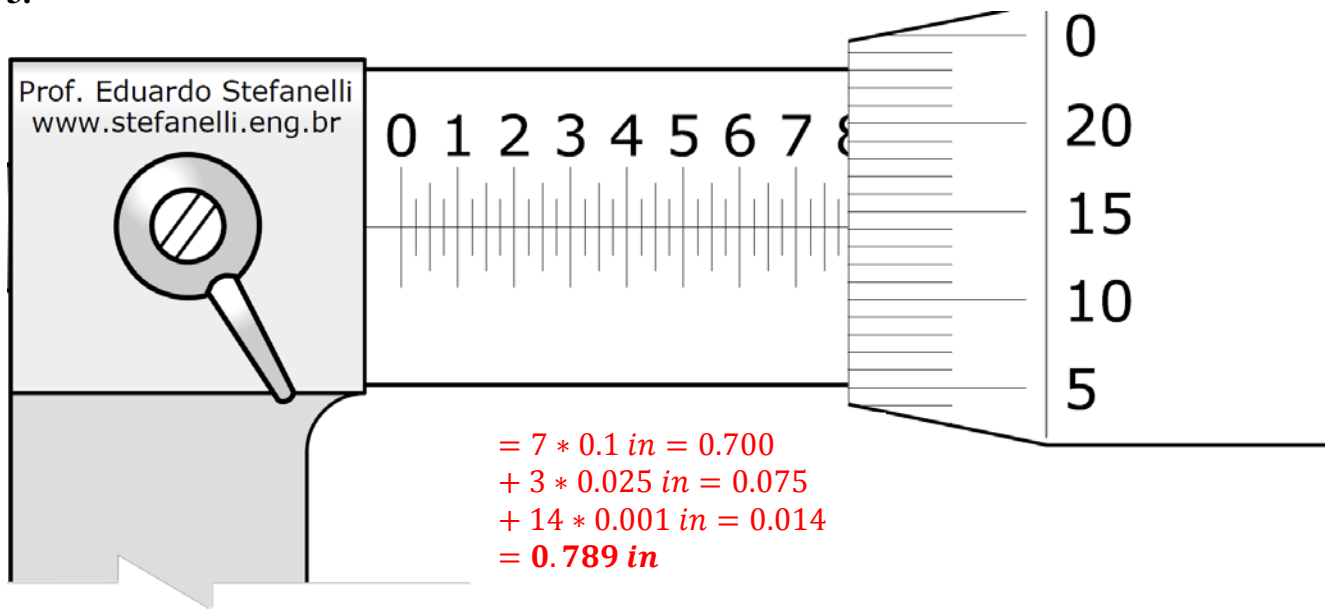
1.6 in

2.



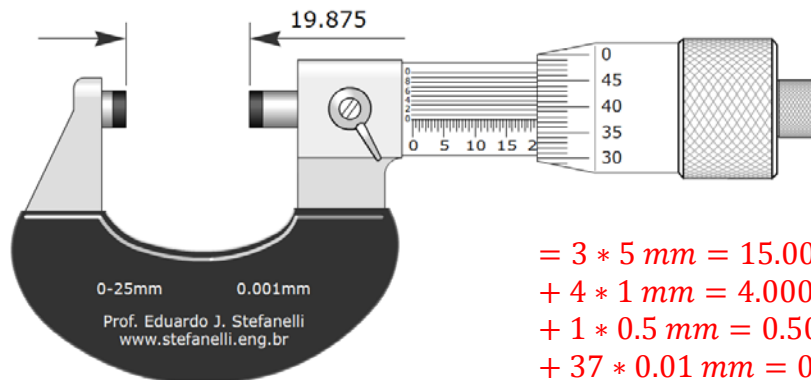
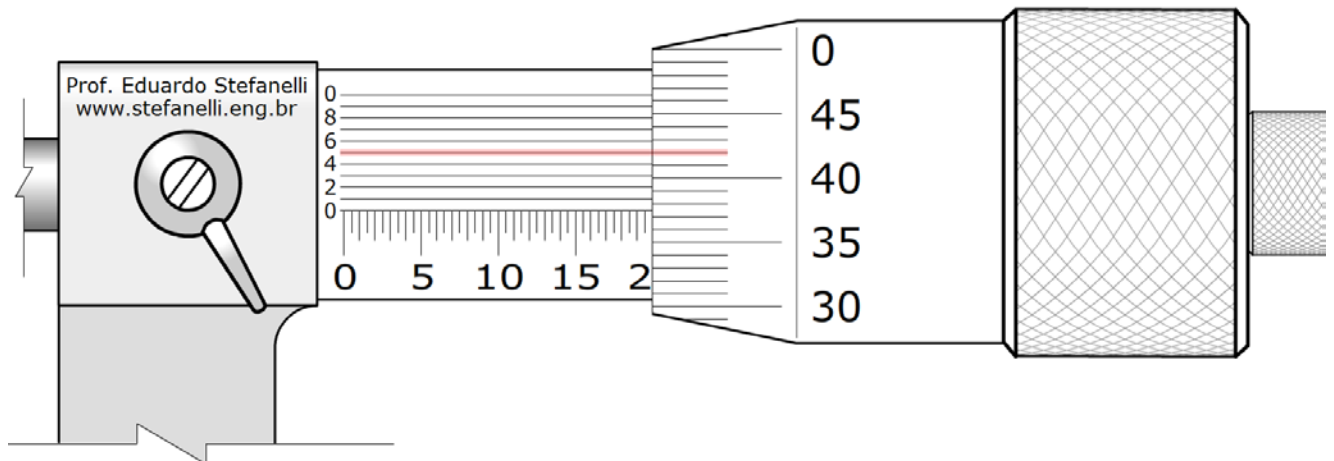
Q2. ANSWER: **45.28 mm**

3.



Q3. ANSWER: **0.789 in**

4.



$$\begin{aligned}
 &= 3 * 5 \text{ mm} = 15.000 \text{ mm} \\
 &+ 4 * 1 \text{ mm} = 4.000 \text{ mm} \\
 &+ 1 * 0.5 \text{ mm} = 0.500 \text{ mm} \\
 &+ 37 * 0.01 \text{ mm} = 0.370 \text{ mm} \\
 &+ 5 * 0.001 \text{ mm} = 0.005 \text{ mm} \\
 &= \mathbf{19.875 \text{ mm}}
 \end{aligned}$$

Q4. ANSWER: **19.875 mm**

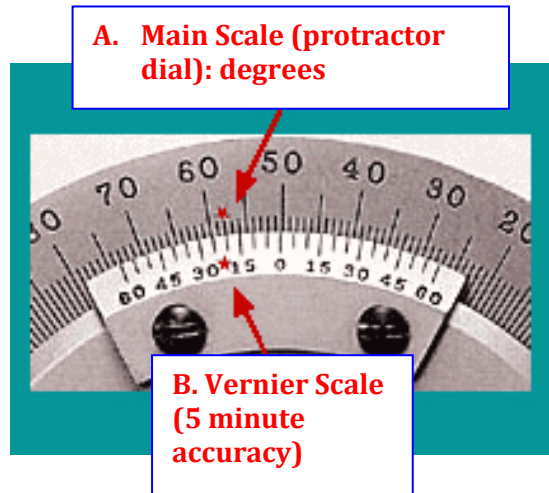
PART – II (2 points)

Label the following gage properly at the letters shown.

a) What is the name of the gage shown below? [1 point]

**Universal Bevel
Protractor**

b) Label the following gage properly at the letters shown. [0.5 –point each]



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“MANUFACTURING PROCESSES – 2”

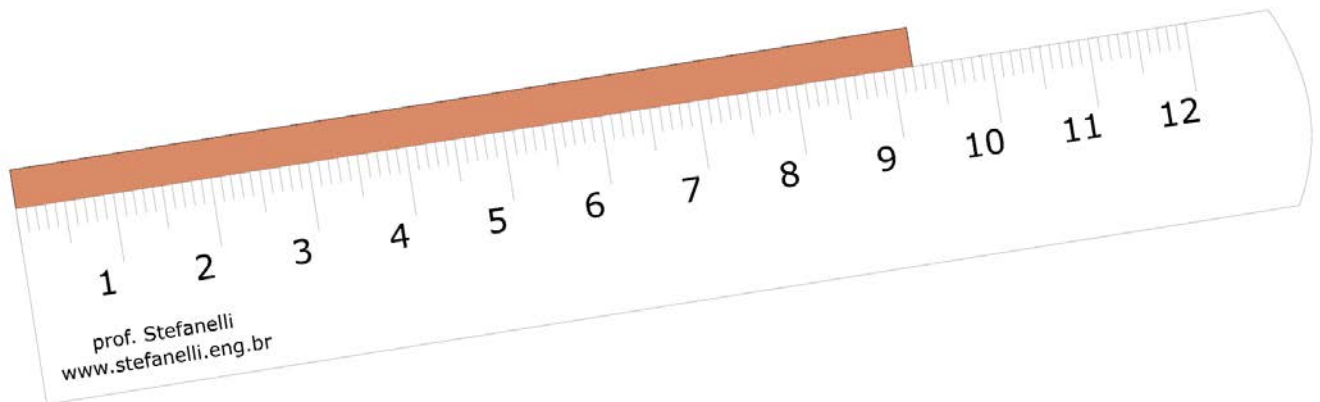
Monday, February 24, 2014 (24/04/1435H)

Quiz 2 ANSWERS

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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PART – I (8 points; 2 points each)**Read the following gages and write the values in the provided box.**

1.

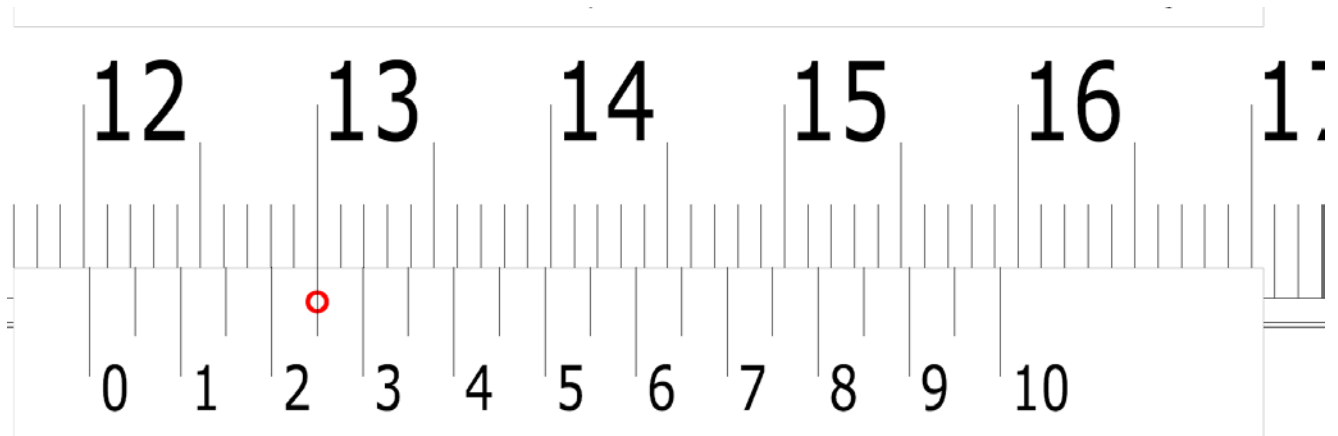


$$= 9 * 10 \text{ mm} + 2 * 1 \text{ mm}$$
$$= \mathbf{92 \text{ mm}}$$

Q1. ANSWER:

92 mm

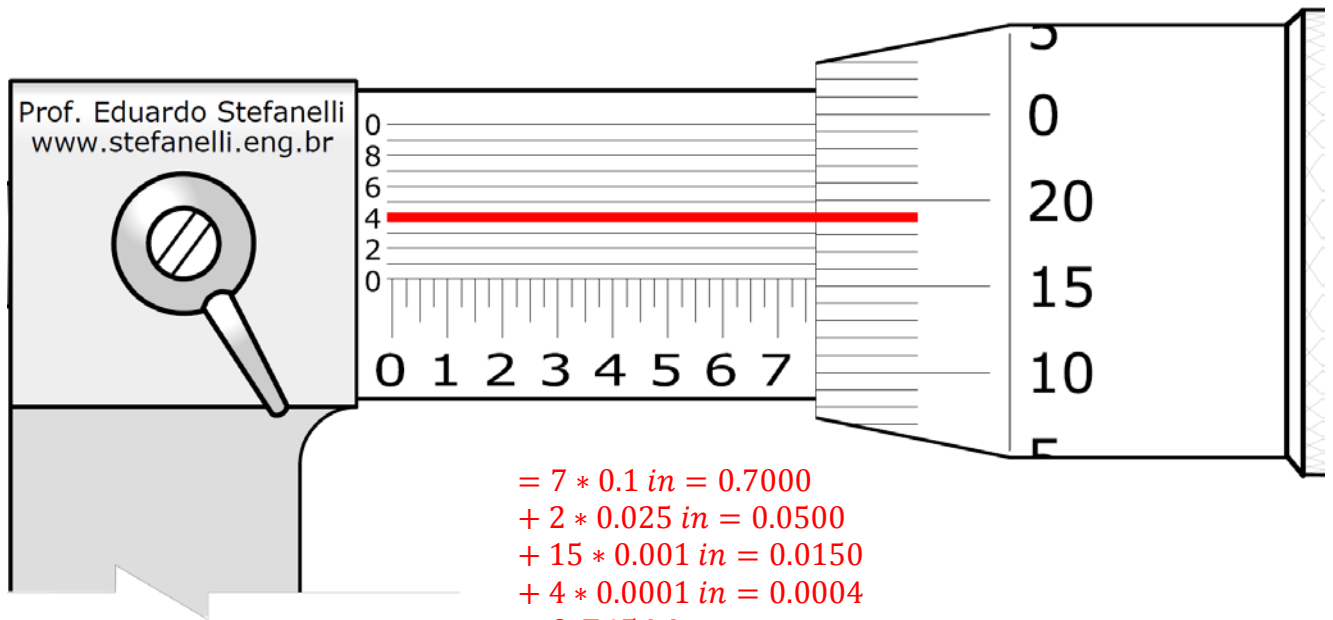
2.



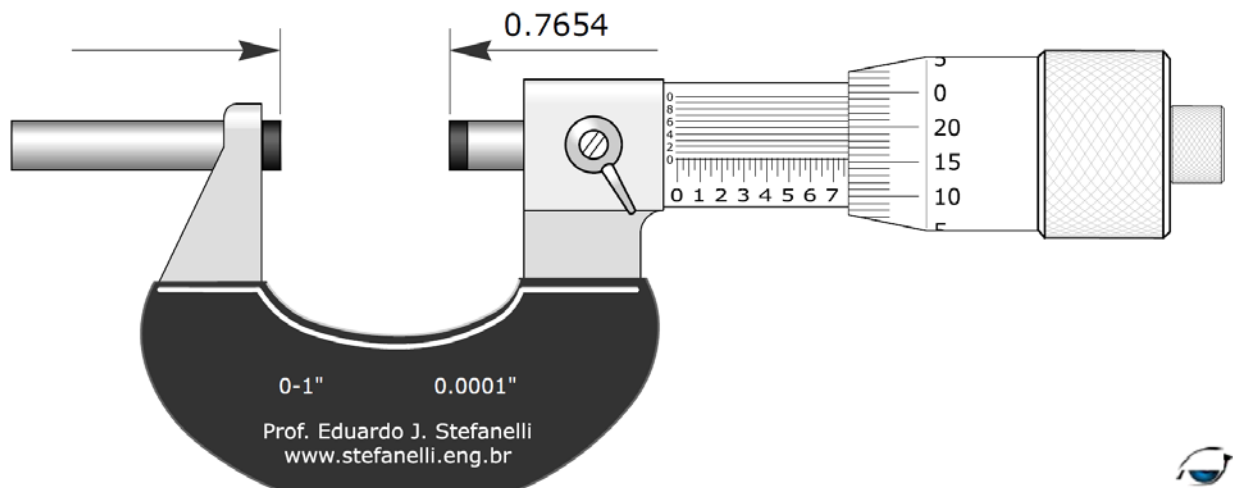
$$\begin{aligned} &= 12 * 10 \text{ mm} = 120.00 \text{ mm} \\ &+ 0 * 1 \text{ mm} = 0 \\ &+ 25 * 0.01 \text{ mm} = 0.25 \text{ mm} \\ &= 120.25 \text{ mm} \end{aligned}$$

Q2. ANSWER: **120.25 mm**

3.

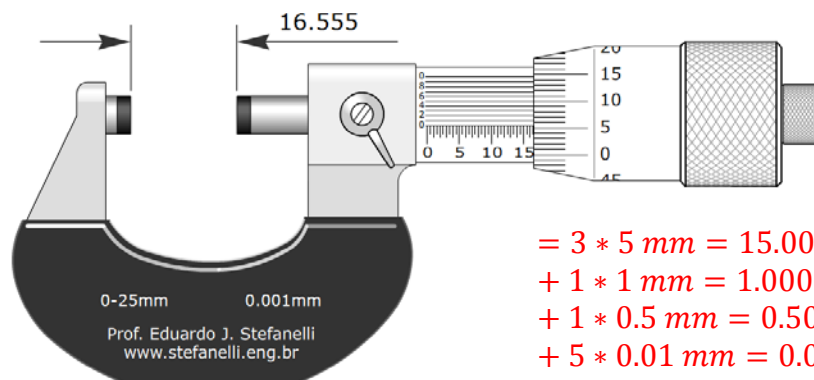
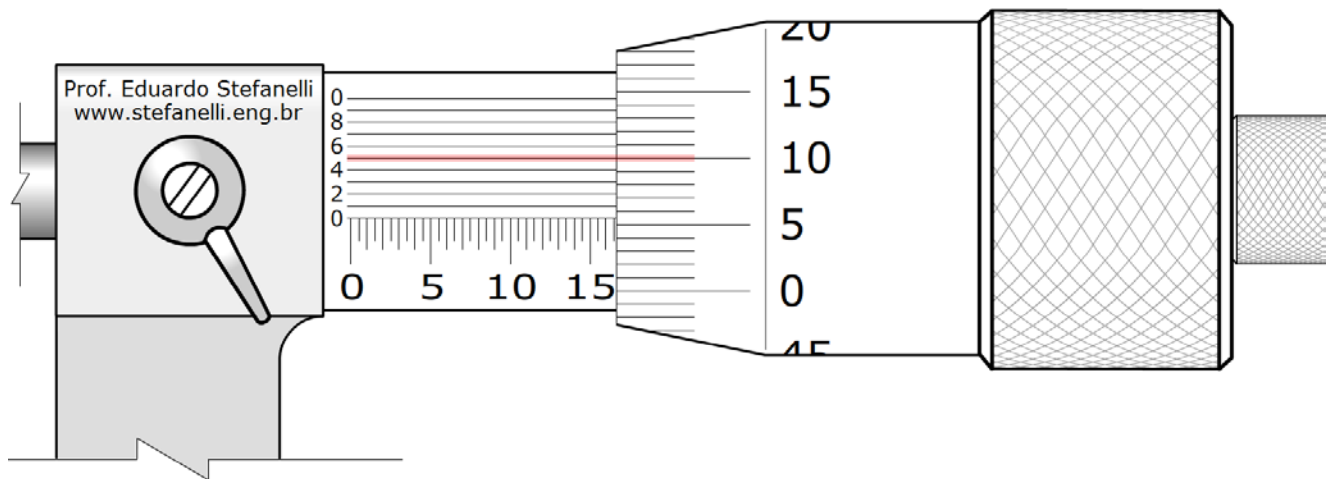


$$\begin{aligned}
 &= 7 * 0.1 \text{ in} = 0.7000 \\
 &+ 2 * 0.025 \text{ in} = 0.0500 \\
 &+ 15 * 0.001 \text{ in} = 0.0150 \\
 &+ 4 * 0.0001 \text{ in} = 0.0004 \\
 &= \mathbf{0.7654 \text{ in}}
 \end{aligned}$$



Q3. ANSWER: **0.7654 in**

4.



$$\begin{aligned}
 &= 3 * 5 \text{ mm} = 15.000 \text{ mm} \\
 &+ 1 * 1 \text{ mm} = 1.000 \text{ mm} \\
 &+ 1 * 0.5 \text{ mm} = 0.500 \text{ mm} \\
 &+ 5 * 0.01 \text{ mm} = 0.050 \text{ mm} \\
 &+ 5 * 0.001 \text{ mm} = 0.005 \text{ mm} \\
 &= 16.555 \text{ mm}
 \end{aligned}$$

Q4. ANSWER: **16.555 mm**

PART – II (2 points)

Label the following gage properly at the letters shown.

- a) What is the name of the gage shown below? [1 point] **Dial Caliper**
- b) Label the following gage properly at the letters shown. [$\frac{1}{4}$ – point each]

