

IE-352  
Section 1, CRN: 48700/1/2  
Section 2, CRN: 48706/7/8  
Second Semester 1435-36 H (Spring-2015) – 4(4,1,2)  
“MANUFACTURING PROCESSES – 2”

Sunday, February 22, 2015 (03/05/1436H)

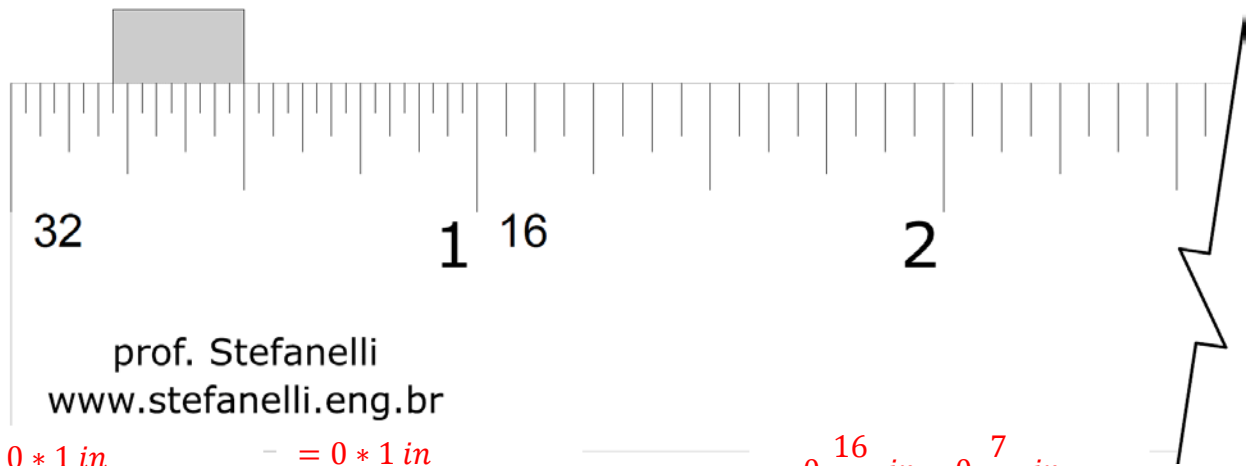
Quiz 2 ANSWERS

Name: <b>AHMED M. EL-SHERBEENY, PHD</b>	Student Number: 4	Section: 10 / 11
--	----------------------	---------------------

**PART – I [8 points; 2 points each]**

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

1.



$$= 0 * 1 \text{ in}$$

$$+ 7 * \frac{1}{32} \text{ in}$$

$$= 0. \frac{7}{32} \text{ in}$$

$$- = 0 * 1 \text{ in}$$

$$+ 16 * \frac{1}{32} \text{ in}$$

$$= 0. \frac{16}{32} \text{ in}$$

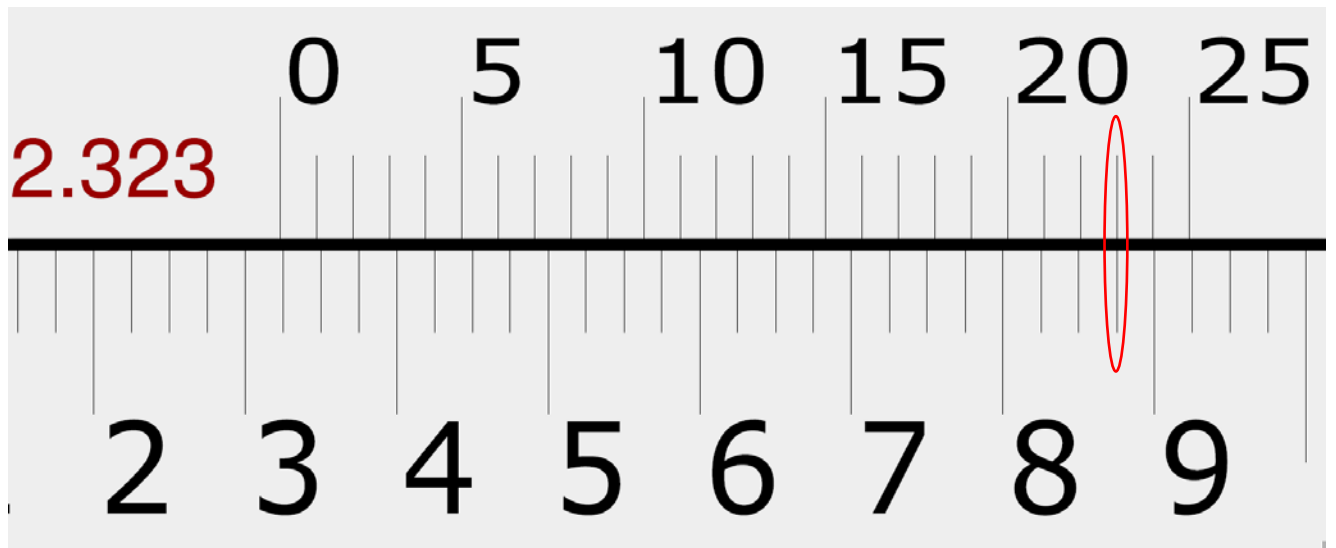
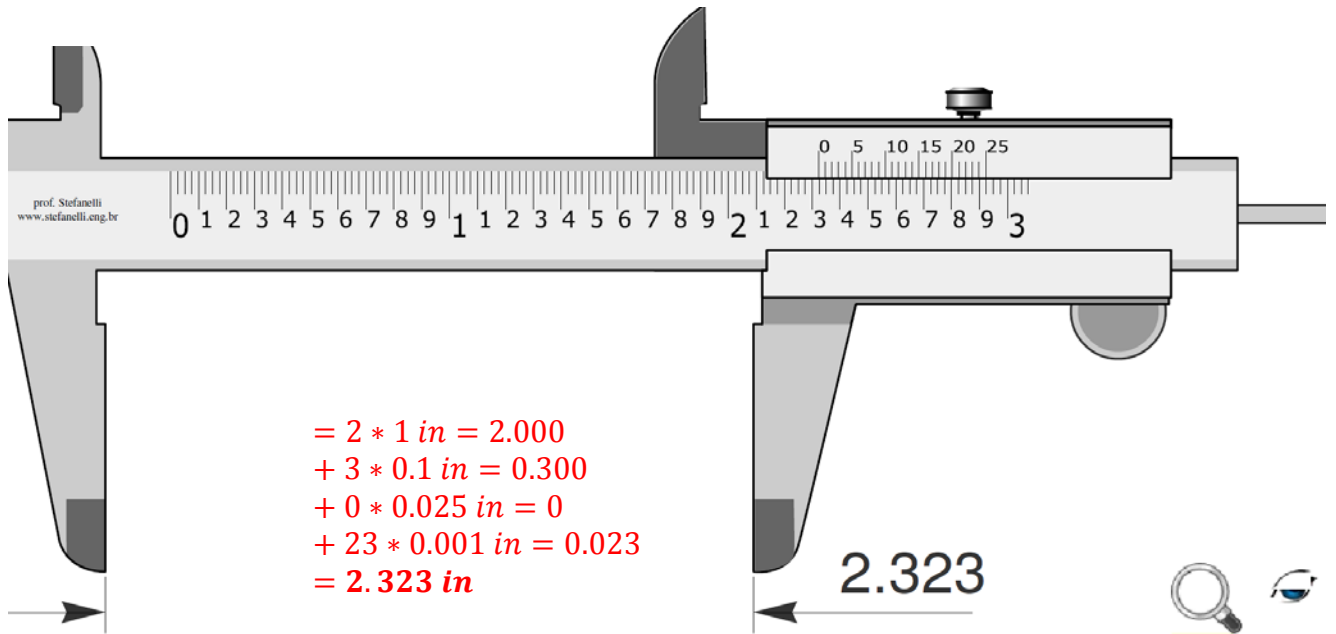
$$= 0. \frac{16}{32} \text{ in} - 0. \frac{7}{32} \text{ in}$$

$$= 0. \frac{9}{32} \text{ in}$$

Q1. ANSWER:

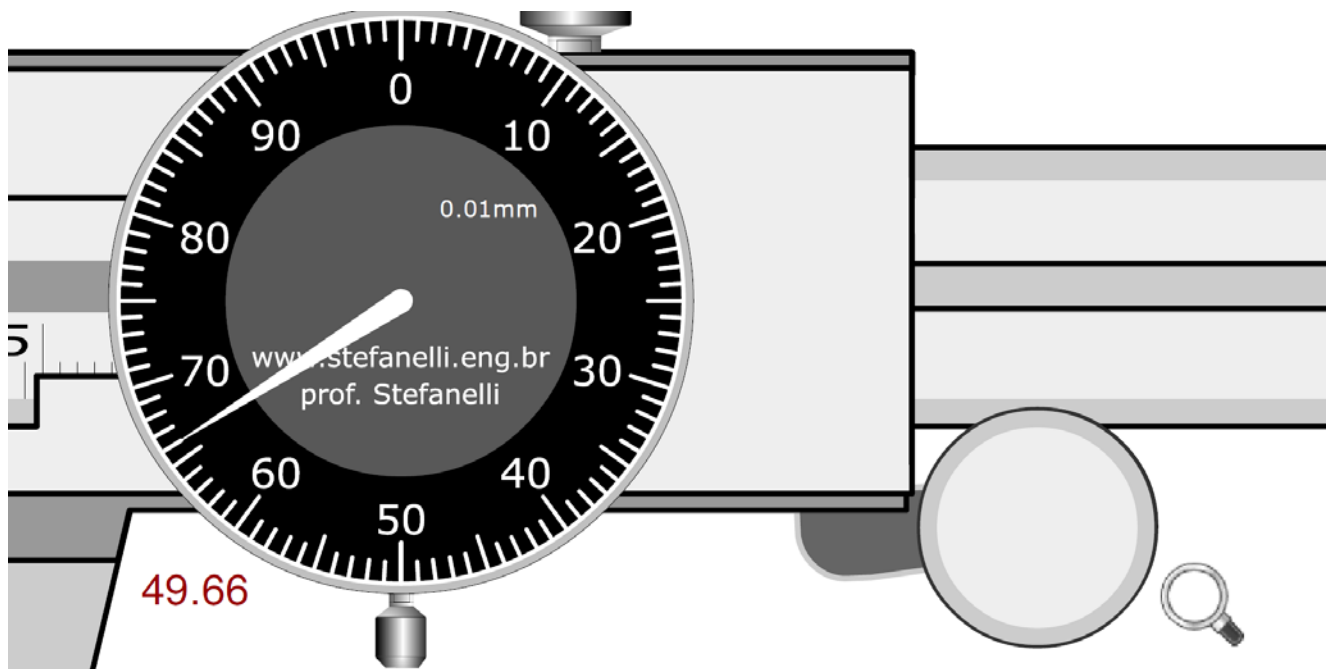
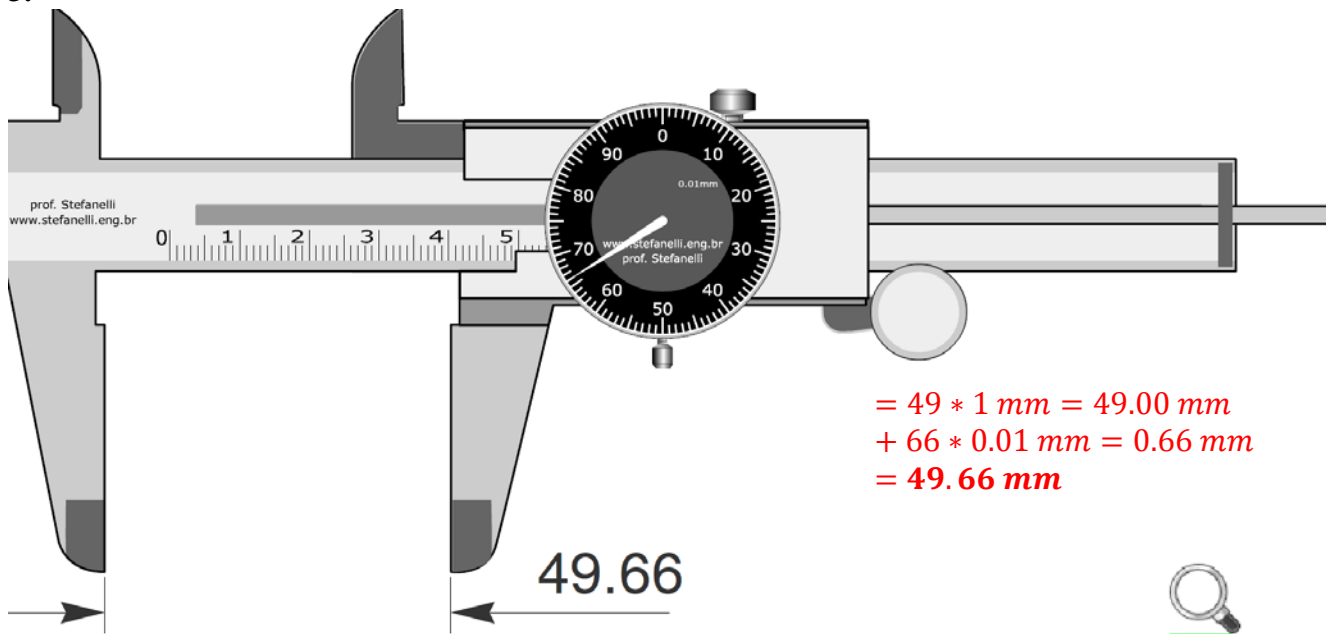
**$0. \frac{9}{32} \text{ in}$**

2.



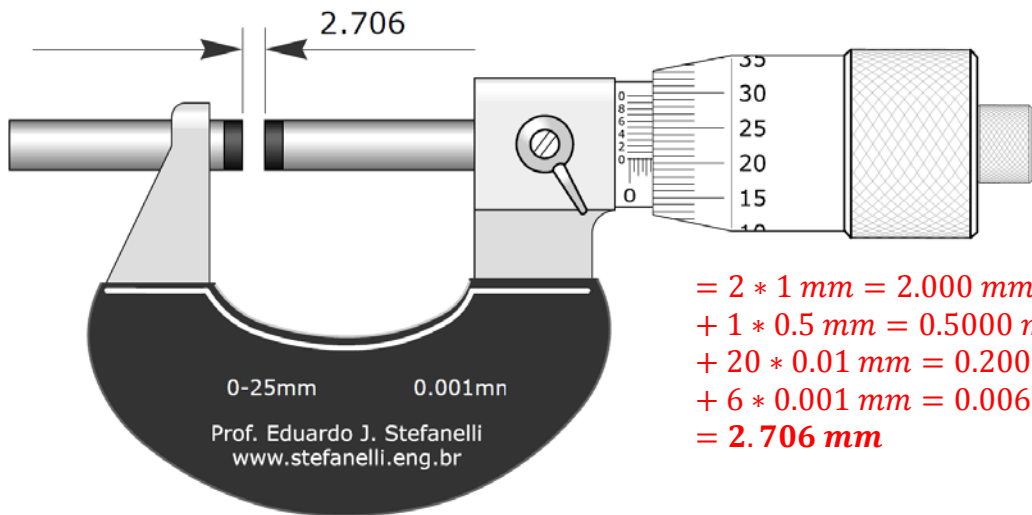
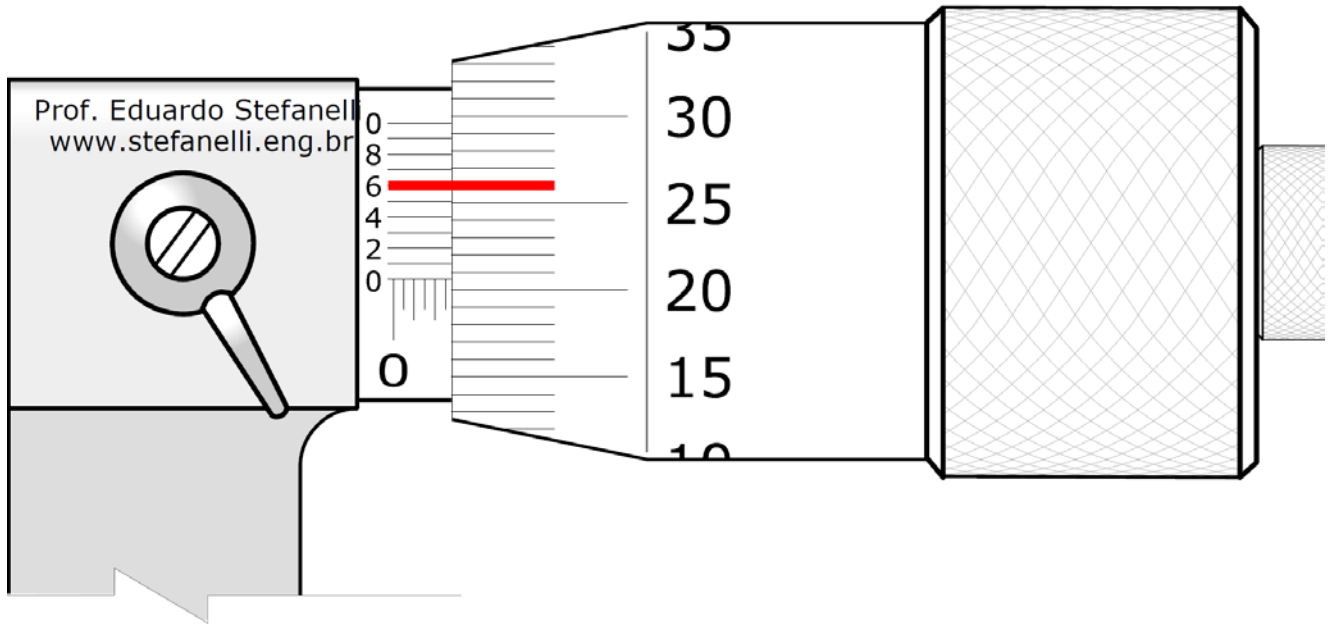
Q2. ANSWER: 2.323 in

3.



Q3. ANSWER: 49.66 mm

4.



$$\begin{aligned}
 &= 2 * 1 \text{ mm} = 2.000 \text{ mm} \\
 &+ 1 * 0.5 \text{ mm} = 0.5000 \text{ mm} \\
 &+ 20 * 0.01 \text{ mm} = 0.200 \text{ mm} \\
 &+ 6 * 0.001 \text{ mm} = 0.006 \text{ mm} \\
 &= \mathbf{2.706 \text{ mm}}
 \end{aligned}$$

Q4. ANSWER: **2.706 mm**

## PART – II (2 points)

Answer the following questions briefly. [2 points; 1 point each]

a) What is the purpose of the ratchet stop?

- *part of the micrometer caliper*
- *helps to regulate pressure*
- *it is used to rotate the spindle*
- *when the pressure reaches a predetermined amount, the ratchet stop slips and prevents further spindle turning*

*see slide 2.23*

b) What is the purpose of the dial indicator snap gage?

- *it's a type of go no-go gage*
- *measures the amount of variation in the part measurement*

*see slide 2.41*