

Demonstrate Selecting, Using and Maintaining a range of Precision and Non-Precision Tools to Accurately Measure

Skill Number CO-OP15GN105

Full Name: Arban Pratama Umbu No. ID: 01

Validation Date: 13-3-2026

School: SMKN 01 SINGOSARI

PERFORMANCE TASK:

Given some measuring tools, the student is requested to perform the following tasks on various measuring tools:

- Selecting
- Using
- Recording
- Maintaining

The student will be instructed to measure with a non-precision gauge such as: steel ruler, feeler gauge and precision tools such as vernier callipers, outside, inside and depth micrometer the dimension of some given parts. Literature and measuring tools will be made available but will not be provided directly to the student.

The student must be able to perform the following task:

- Demonstrate using various measuring tools on an engine or other system components.

Safety and Contamination Control must be always applied to this process.

Prerequisite	Yes	No	N/A	Hints
The student must complete the knowledge assessment. Minimum passing grade 80%.	<input checked="" type="checkbox"/>			Score measuring tools Course or subject.

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Preparation	<input checked="" type="checkbox"/>			
Prepare related literature	<input checked="" type="checkbox"/>			
Prepare required equipment	<input checked="" type="checkbox"/>			
Prepare related tools	<input checked="" type="checkbox"/>			
Prepare Safety & Contamination Control equipment	<input checked="" type="checkbox"/>			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner when starting the job	<input checked="" type="checkbox"/>			
Meet the customer / assessor	<input checked="" type="checkbox"/>			
Perform etiquette/manner when opening the interaction.	<input checked="" type="checkbox"/>			• Perform smile & g • Introduce Student
Explain the purpose of Student's activity.	<input checked="" type="checkbox"/>			
Ask permission to perform the job.	<input checked="" type="checkbox"/>			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Selecting, Using and Maintaining a range of Precision and Non-Precision Tools				
1. Inspect the measuring tool before using	<input checked="" type="checkbox"/>			Visual inspection of the measur wear, cracks, damage
2. Clean tool and component	<input checked="" type="checkbox"/>			Using of consumables CC tools
3. Calibrate measuring tools before using	<input checked="" type="checkbox"/>			Tools should be calibrated procedure
4. Measure component use measuring tools with tolerance allowance 0.5 mm (0.02" or 1/25") for non-precision measuring tools and 0.025 mm (0.001") for precision measuring tools.	<input checked="" type="checkbox"/>			Thread identification gauge pressure gauge without toleran
5. Tasks completed without damage to equipment and tools	<input checked="" type="checkbox"/>			Component and tooling are dea assembled as given procedure
6. Equipment and tooling are cleaned and returned to its correct location	<input checked="" type="checkbox"/>			Cleaned and stored equipment right place.
7. Record the reading of the measurements	<input checked="" type="checkbox"/>			Write the actual reading on the by the assessor
Documentation:				
Take picture if needed				



Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform close the job by ensuring all systems or conditions is in the standard condition	✓			<ul style="list-style-type: none"> Find the improper condition. Communicate the finding to the customer/assessor.
Ensure all systems or conditions are in standard condition.	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Reporting				<ul style="list-style-type: none"> Completing the Task List Completing Measurement Form/Related Check Sheet, if required Create Service Report (SIMS), if required Create SPR, if required Documenting the failed or damaged parts, if required Provide Technical Analysis Report/Failure Analysis Report, if required.
All relevant documentation completed correctly and approved by customer (if required).	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Safety				
Using PPE related to the job	✓			
Follows relevant Workplace Safety Guidelines (LOTO, Safety Equipment)	✓			Comply with safety regulation that applied on the workplace
State and follow Safety Precautions	✓			<ul style="list-style-type: none"> Create Job Safety Analysis Student must follow safety procedure refer to service manual or SIS related to job
Service man completes job without accident due to incorrect procedure using hand tools.	✓			<ul style="list-style-type: none"> Correct working position Correct hand tool related to the job
Tasks completed without damage equipment and tools	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Contamination Control				
Environmental Practices & Housekeeping	✓			<ol style="list-style-type: none"> Waste is minimized, waste including sludge, solids and wastes are sorted and store recycling or disposal Packaging of goods receive and reused or disposed of Materials that can be reuse cleaned and stored Waste and scrap are removed All fluids are disposed of in following workplace proced with enterprise policies and

Tasks	Completed			Observation
	Yes	No	N/A	
Perform etiquette/manner after completing the job				
Perform etiquette/manner when closing the communication.	✓			<ul style="list-style-type: none"> Perform smile & g Ask permission to the interaction.

Demonstrate Selecting, Using and Maintaining a range of Precision and Non-Precision Tools to Accurately Measure

Skill Number CO-OP15GN105

Full Name: Akhar Pratama Umbu No ID: 01

Validation Date: 13-3-2026

School: SHKNI 01 SINGOSARI

PERFORMANCE TASK:

Given some measuring tools, the student is requested to perform the following tasks on various measuring tools:

- Selecting
- Using
- Recording
- Maintaining

The student will be instructed to measure with a non-precision gauge such as: steel ruler, feeler gauge and precision tools such as vernier calipers, outside, inside and depth micrometer the dimension of some given parts. Literature and measuring tools will be made available but will not be provided directly to the student.

The student must be able to perform the following task:

- Demonstrate using various measuring tools on an engine or other system components.

Safety and Contamination Control must be always applied to this process.

Prerequisite	Yes	No	N/A	Hints
The student must complete the knowledge assessment. Minimum passing grade 80%.				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Preparation				
Prepare related literature				
Prepare required equipment				
Prepare related tools				
Prepare Safety & Contamination Control equipment				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner when starting the job				
Meet the customer / assessor				
Perform etiquette/manner when opening the interaction.				
Explain the purpose of Student's activity.				
Ask permission to perform the job.				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Selecting, Using and Maintaining a range of Precision and Non-Precision Tools				
1. Inspect the measuring tool before using				
2. Clean tool and component				
3. Calibrate measuring tools before using				
4. Measure component use measuring tools with tolerance allowance 0.5 mm (0.02" or 1/25") for non-precision measuring tools and 0.025 mm (0.001") for precision measuring tools.				
5. Tasks completed without damage to equipment and tools				
6. Equipment and tooling are cleaned and returned to its correct location				
7. Record the reading of the measurements				
Documentation:				
Take picture if needed				



Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform close the job by ensuring all systems or conditions is in the standard condition				
Ensure all systems or conditions are in standard condition.				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Reporting				
All relevant documentation completed correctly and approved by customer (if required).				

Tasks	Completed		Observation / Hints
	Yes	No	
Safety			
Using PPE related to the job			
Follows relevant Workplace Safety Guidelines (LOTO, Safety Equipment)			
State and follow Safety Precautions			
Service man completes job without accident due to incorrect procedure using hand tools.			
Tasks completed without damage equipment and tools			

Tasks	Completed		Observation / Hints
	Yes	No	
Contamination Control			
Environmental Practices & Housekeeping			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner after completing the job				
Perform etiquette/manner when closing the communication.				

General Comments

RESULT: **COMPETENT** **NOT YET COMPETENT** (please check 'N')

Student: Lembu Name _____ Date _____ Signature _____

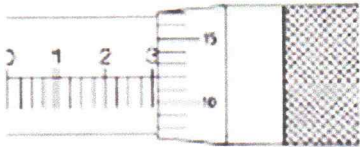
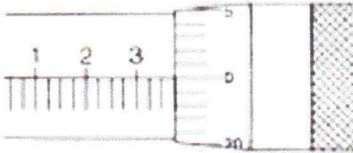
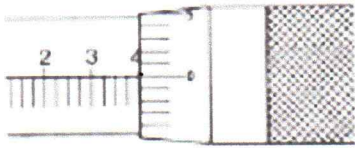
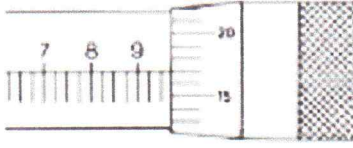
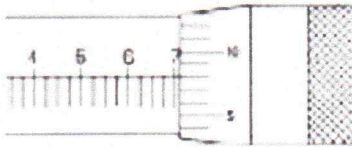
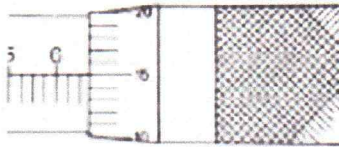
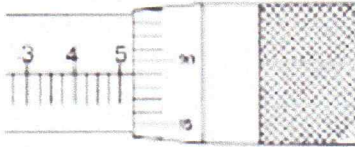
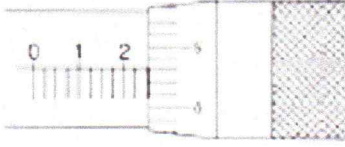
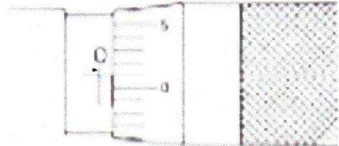

Assessor: Sekianan Name _____ Date 12/3/20 Signature _____

Supervisor: _____ Name _____ Date _____ Signature _____

Data Recorded: _____ Name _____ Date _____ Signature _____



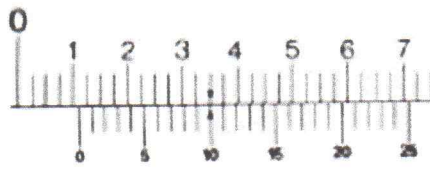
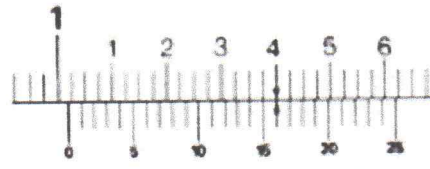
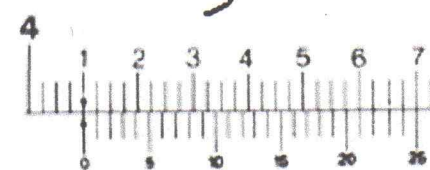
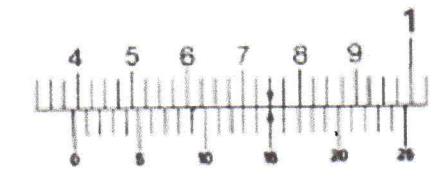
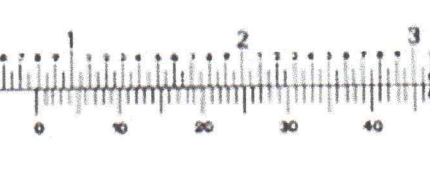
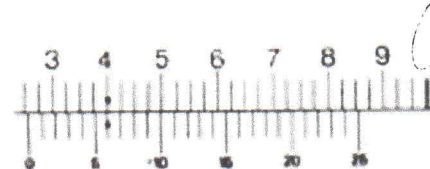

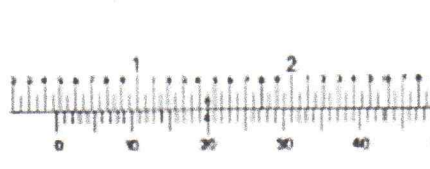
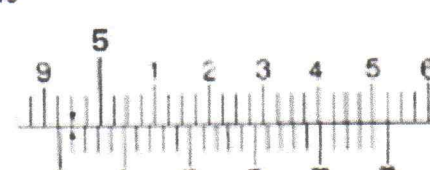

Latihan Membaca Micrometer Inch

<p>3.47</p>  <p>Jawaban : <u>3,12 inch</u> ✓</p>	<p>3.48</p>  <p>Jawaban : <u>3,75 inch</u> ✓</p>
<p>3.49</p>  <p>: <u>4 inch</u></p>	<p>3.50</p>  <p>: <u>9,67 inch</u></p>
<p>3.51</p>  <p>Jawaban : <u>7,08 inch</u></p>	<p>3.52</p>  <p>Jawaban : <u>6,65 inch</u></p>
<p>3.53</p>  <p>Jawaban : <u>5,19 inch</u></p>	<p>3.54</p>  <p>Jawaban : <u>2,53 inch</u> ✓</p>
<p>3.55</p>  <p>Jawaban : <u>0,26 inch</u></p>	<p>3.56</p>  <p>Jawaban : <u>1,49 inch</u></p>

0,04 0 - 1"

0,400

Latihan Membaca Vernier Inch

<p>3.37</p>  <p>Jawaban : <u>0,110 inch</u></p>	<p>3.38</p>  <p>Jawaban : <u>1,016 inch</u></p>
<p>3.39</p>  <p>Jawaban : <u>4,1 inch</u></p>	<p>3.40</p>  <p>Jawaban : <u>0,390 inch</u></p>
<p>3.41</p>  <p>Jawaban : <u>0,797 inch</u></p>	<p>3.42</p>  <p>Jawaban : <u>5,256 inch</u></p>
<p>3.43</p>  <p>Jawaban : <u>0,752 inch</u></p>	<p>3.44</p>  <p>Jawaban : <u>0,470 inch</u></p>
<p>3.45</p>  <p>Jawaban : <u>4,926 inch</u></p>	<p>3.46</p>  <p>Jawaban : <u>4,639 inch</u></p>

3.28

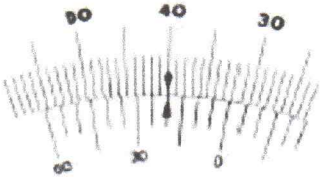
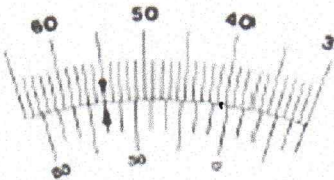
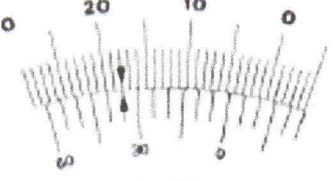
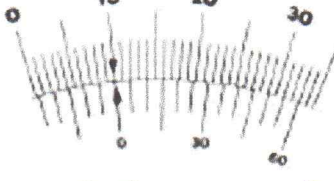
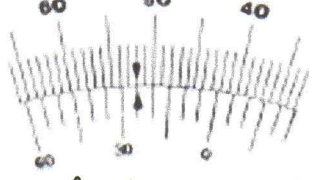
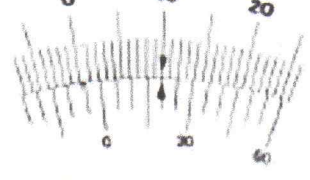
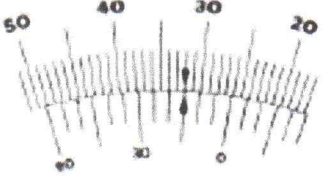
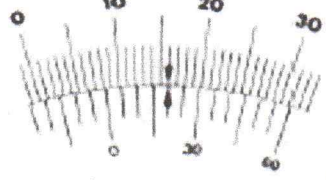
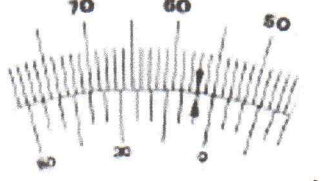
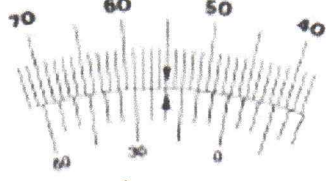
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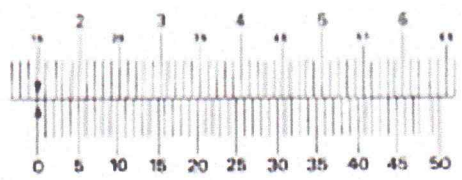
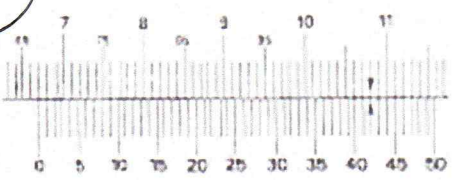
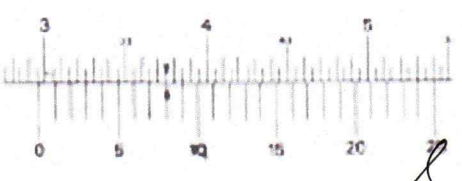
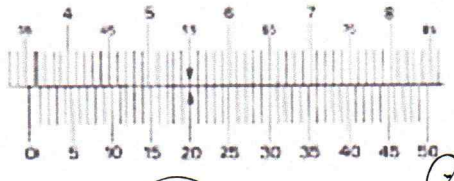
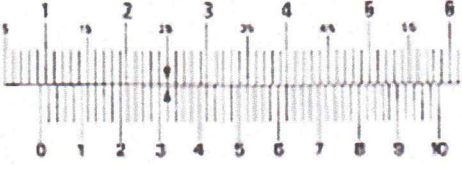
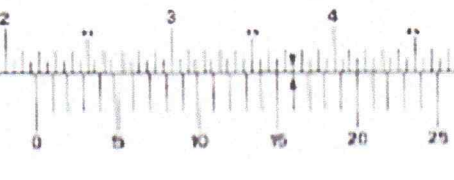
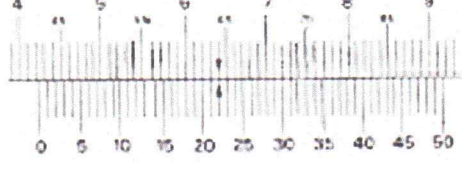


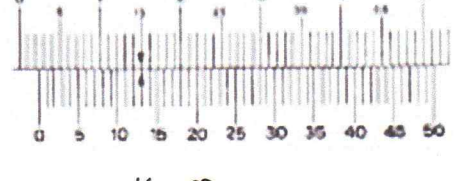
8



Bacaan Vernier Protractor

<p>3.27</p>  <p>: $32^{\circ} 20'$</p>	<p>3.28</p>  <p>: $40^{\circ} 40'$</p>
<p>3.29</p>  <p>: $4^{\circ} 35'$</p>	<p>3.30</p>  <p>: $10^{\circ} 0'$</p>
<p>3.31</p>  <p>: $42^{\circ} 25'$</p>	<p>3.32</p>  <p>: $2^{\circ} 20'$</p>
<p>3.33</p>  <p>: $26^{\circ} 15'$</p>	<p>3.34</p>  <p>: $8^{\circ} 20'$</p>
<p>3.35</p>  <p>: $55^{\circ} 5'$</p>	<p>3.36</p>  <p>: $47^{\circ} 20'$</p>

Bacaan Metric Vernier

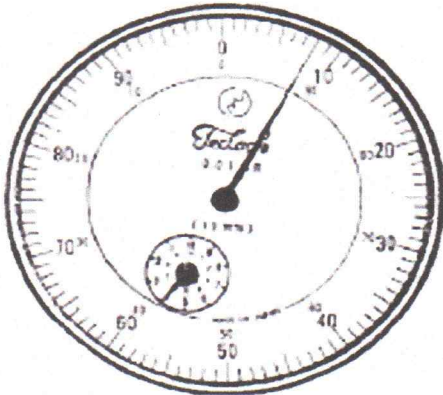
<p>3.17</p>  <p>Jawaban : <u>15 mm</u></p>	<p>3.18</p>  <p>Jawaban : <u>67,42 mm</u></p>
<p>3.19</p>  <p>Jawaban : <u>29,58 mm</u></p>	<p>3.20</p>  <p>Jawaban : <u>33,20 mm</u></p>
<p>3.21</p>  <p>Jawaban : <u>9,31 mm</u></p>	<p>3.22</p>  <p>Jawaban : <u>21,66 mm</u></p>
<p>3.23</p>  <p>Jawaban : <u>42,24 mm</u></p>	<p>3.24</p>  <p>Jawaban : <u>11,54 mm</u></p>
<p>3.25</p>  <p>Jawaban : <u>36,56 mm</u></p>	<p>3.26</p>  <p>Jawaban : <u>2,16 mm</u></p>

$$\begin{array}{r} 21,50 \\ \underline{16} \\ 6 \end{array}$$

$$\begin{array}{r} 21. \\ \underline{6.} \\ 15. \\ \underline{4} \\ 19 \end{array}$$

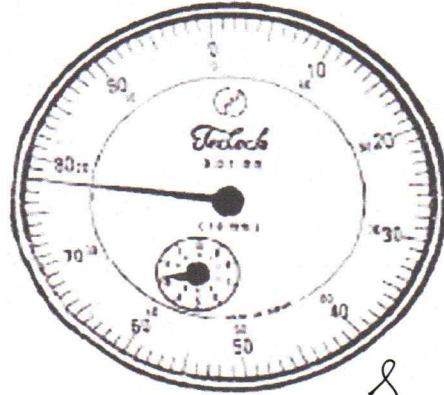
Bacaan Metric Indicator

3.11



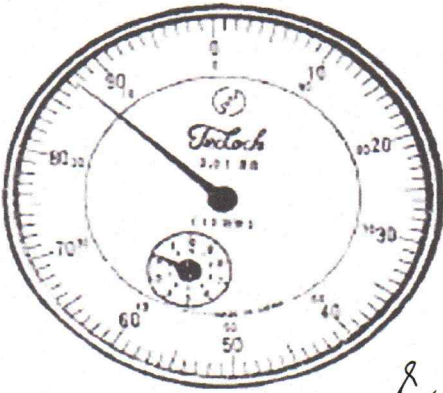
Jawaban : 9,08 mm

3.12



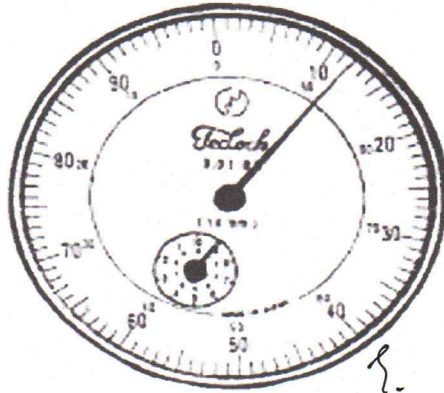
Jawaban : 2,78 mm

3.13



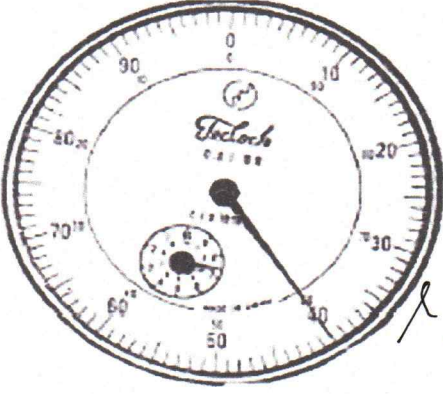
Jawaban : 1,81 mm

3.14



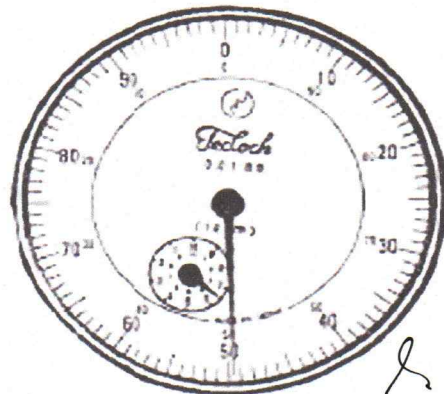
Jawaban : 9,12 mm

3.15



Jawaban : 7,90 mm

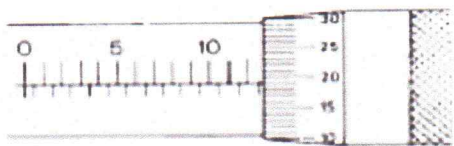
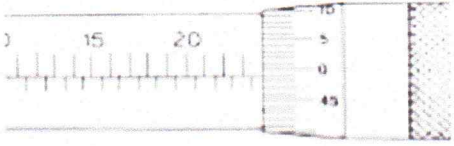
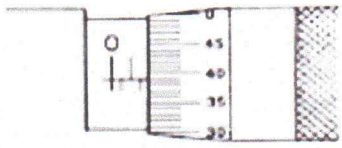
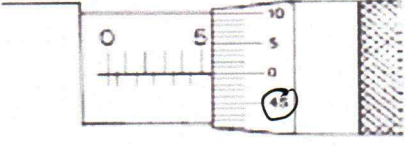
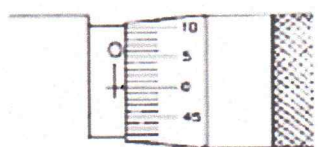

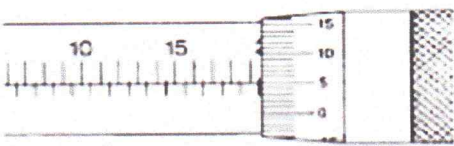
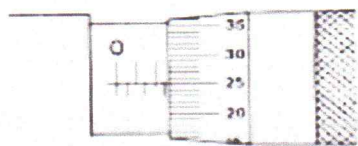
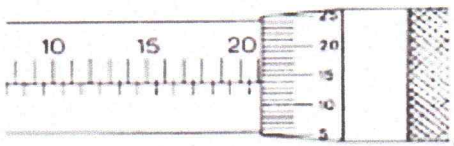
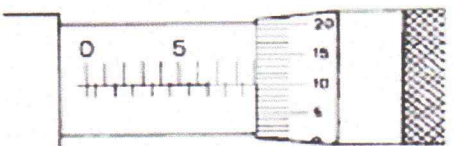
3.16



Jawaban : 6,99 mm

KEGIATAN 3: PENGUKURAN DASAR & PRESISI

Bacaan Metric Micrometer

<p>3.1</p>  <p>Jawaban : <u>12,69 mm</u> ✓</p>	<p>3.2</p>  <p>Jawaban : <u>23,99 mm</u> ✓</p>
<p>3.3</p>  <p>: <u>1,89 mm</u> ✓</p>	<p>3.4</p>  <p>: <u>5mm</u> <u>5,50</u></p>
<p>3.5</p>  <p>Jawaban : <u>0 mm</u> ✓</p>	<p>3.6</p>  <p>Jawaban : <u>7,22 mm</u></p>
<p>3.7</p>  <p>Jawaban : <u>19,55 mm</u> ♪</p>	<p>3.8</p>  <p>Jawaban : <u>2,75 mm</u> ♪</p>
<p>3.9</p>  <p>Jawaban : <u>21,14 mm</u> ♪</p>	<p>3.10</p>  <p>Jawaban : <u>9,10 mm</u> ♪</p>

