

# Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767

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## Basic Algebra – Unit 9: Rulers, Calipers, and Micrometers Study Guide

Text: Introductory Technical Mathematics, 6th Edition, Chapters 10 & 11

Note: Do "Odd" numbered problems only

- 1. Review course structure.
- 2. Read Units 10.1 to 10.3: pages 289-291: Types of Rules, Reading Fractional Measurements and Measurements that do not Fall on Rule Graduations.
- 3. Do Exercises 10.3: page 292: # "a" to "o" for practice.
- 4. Read Unit 10.4: pages 292-293: Reading Decimal-Inch Measurements.
- 5. Do Exercises 10.4: page 293: # "a" to "o" for practice.
- 6. Read Unit 10.5: pages 293-294: Reading Metric Measurements.
- 7. Do Exercises 10.5: page 294: # "a" to "o" for practice.
- 8. Read Units 10.6 to 10.7: pages 294-297: Types of Vernier Calipers and Reading Measurements on a Vernier Caliper.
- 9. Do Exercises 10.7: pages 297-298: # 1-5 for practice.
- 10. Read Unit 10.8: pages 298-299: Reading Measurements on a Metric Vernier Caliper.
- 11. Do Exercises 10.8: page 299: # 1-5 for practice.
- 12. Read Unit 10.9: pages 300-302: Reading Digital Calipers.
- 13. Do Exercises 10.9: page 302: # 1-9 for practice.

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- 14. Review course structure for Chapter 11.
- 15. Read Units 11.1 to 11.4: pages 305-309: Description of a Customary Outside Micrometer, Reading a Customary Micrometer, Vernier Micrometer and Reading a Vernier Micrometer.
- 16. Do Exercises 11.4: page 309: # 1-11 for practice.







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- 17. Read Units 11.5 to 11.8: pages 310-313: Description of a Metric Micrometer, Reading a Metric Micrometer, Metric Vernier Micrometer and Reading a Metric Vernier Micrometer.
- 18. Do Exercises 11.8: pages 313-314: # 1-11 for practice.
- 19. Read Unit 11.9: pages 314-315: Reading a Digital Micrometer
- 20. Do Exercises 11.9: pages 315-313: # 1-9 for practice.
- 21. Complete exercises on the Fundamentals of Industrial Process Control found at: <a href="http://ipfs.io/ipfs/QmTmMhRv2nh889JfYBWXdxSvNS6zWnh4QFo4Q2knV7Ei2B/Electronics/Fundamentals%20of%20Industrial%20Instrumentation%20and%20Process%20Control%20[by%20William%20Dunn].pdf</a>
- 22. Complete Unit Lab/Test in lab. See lab instructor.







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