

## Homework - Cutting Unified External Threads

Student Name \_\_\_\_\_ Date \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Threads are cut or chased on the lathe with a single point tool by: 1) \_\_\_\_\_
  - A) Using a threading die
  - B) Setting the correct feeds on the quick-change gear box
  - C) Moving the carriage by means of the rack that is located under the front way
  - D) Making a series of cuts in the same groove
  
- 2) Sixty degree thread cutting is best done with the compound set at 29 degrees so that: 2) \_\_\_\_\_
  - A) Provide a cleaner cutting action
  - B) Threads can be cut more quickly than with a straight infeed
  - C) It will be swing out of the way to make the cross feed micrometer dial more visible
  - D) Most of the cutting is done on the trailing edge of the tool as it is fed in, but the compound is brought back to zero at the end of each cut causing some cutting on the leading edge on the next pass
  
- 3) Threading tools are checked for accuracy on the 60-degree angle by using a: 3) \_\_\_\_\_
  - A) Tool angle gage
  - B) Thread gage
  - C) Center gage
  - D) Screw pitch gage
  
- 4) The tool is aligned with the work: 4) \_\_\_\_\_
  - A) By squaring the tool on the face of the workpiece
  - B) With a thread gage
  - C) With a small square
  - D) With a center gage
  
- 5) The number of threads per inch can be checked with a: 5) \_\_\_\_\_
  - A) Screw pitch gage
  - B) Metric rule by counting
  - C) Ring gage
  - D) Tool gage
  
- 6) When threading, the carriage is moved along the ways by: 6) \_\_\_\_\_
  - A) A gear train on a rack
  - B) The feed rod spine or keyway
  - C) The hand wheel
  - D) The lead screw
  
- 7) The half-nuts should be engaged when threading odd numbered threads when the threading dial is positioned at: 7) \_\_\_\_\_
  - A) Opposite line only
  - B) Any numbered line
  - C) Any line
  - D) Only one line
  
- 8) For threading, the spindle should be turning: 8) \_\_\_\_\_
  - A) At about one-fourth normal turning speeds
  - B) At the slowest speed the lathe can be set
  - C) At the RPM given in standard charts for the type of metal you are working on
  - D) None of the above

9) Left-hand threads are cut by:

9) \_\_\_\_\_

- A) Using a standard tool and setting the compound 29.5 degrees to the left of the operator
- B) Turning the tool upside down, reversing the rotation of the spindle and moving the tool from left to right
- C) Making a right hand thread and turning it end for end
- D) Using a left hand threading die as these threads cannot be made on an ordinary lathe

10) The thread is picked up when a threading tool is removed for grinding by:

10) \_\_\_\_\_

- A) Replacing the tool in the holder and repositioning the tool by moving the compound and cross feed screws
- B) Replacing the tool in the holder, engaging the half-nuts and repositioning the tool with the compound and cross feed
- C) Replacing the tool in the holder and proceeding with threading
- D) None of the above