

## Math-in-CTE Automotive Technology

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Brake Rotor Measurement (*Show your work*)

1. A technician measures a brake rotor on a Toyota Camry at 0.924 inch. The discard thickness is 0.882 inch. If the technician machines a 0.013 inch cut off of the rotor, what will the new thickness be. Should the technician discard the rotor or reuse it?
2. Israel finds the discard specification for a Honda CR-V front brake rotor at 26.0 mm. He measures his rotor at 26.37 mm and determines it needs to be cut 0.431 mm to be resurfaced. What is the new thickness of his rotor? Can the rotor be reused?
3. Justin measures a brake rotor from a 2006 Dodge Ram at 31.191mm. He can only find the discard specification as 1.215in. He machines a 0.070in cut off of the rotor. What is the new rotor thickness? Can the rotor be reused? (Given 1"=25.4mm)
4. Determine if the following inequality is true when  $x= 2$  and  $y= 3$ .  
$$y + 2x < 9$$
5. Determine if the following inequality is true when  $x= 5$  and  $y= 7$ .  
$$4y - 3.2x > 12$$
6. Determine if the following inequality is true when  $x= 1.6$  and  $y= 4.3$ .  
$$y > 10 - 5.1x$$