

Aircraft Maintenance Engineer Math Readiness Assessment

Please note that calculators are NOT allowed.

Scrap paper is provided.

1. Subtract and round the answer to the nearest hundreds: $3835 - 1278 =$

2. Which number is the largest?

a) 0.00576 b) 0.02010 c) 0.04006 d) 0.00406 e) 0.00601

FRACTIONS: Reduce your answer to the lowest value

3. $\frac{3}{4} + \frac{9}{16} =$

4. $7\frac{3}{4} \div \frac{3}{8} =$

LINEAR MEASURE – Reduce your answer to the lowest value.

One foot (1') is equal to 12 inches (12 ")

5. Subtract: $37' 3\frac{3}{16}'' - 8' 10\frac{5}{8}'' =$

6. Multiply: $4' 8\frac{5}{8}'' \times 6 =$

CONVERSIONS

7. The tolerance indicated on the technical drawing is 2.75 millimetres. Convert this tolerance to inches.

8. The propeller blade is 3.69 feet long. Convert this length to centimetres.

APPLIED PROBLEMS

9. At the beginning of the day on Monday the parts department has 535 spark plugs in stock. The service department estimates they will need 78 plugs per day. A shipment of 500 new spark plugs will arrive on Thursday. Calculate the number of spark plugs the department will have in stock by the end of the day Friday.
10. Ohm's Law deals with the relationship between voltage and current in an ideal conductor. It is defined as $V = I \times R$ where V is the potential difference between two points which include a resistance R measured in ohms (Ω). I is the current flowing through the resistance.

Question: A taxi light has a resistance value of 3.9Ω and the system's voltage is 12V. Calculate the current.