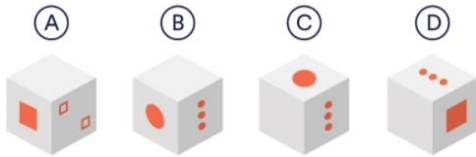
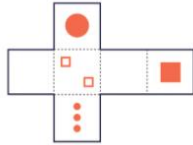


## Entrance Exam Sample Test

1. Which Figure could be assembled from the cutout below?



2. If Gear A turns in the direction indicated by the arrow, which way will gear C turn?

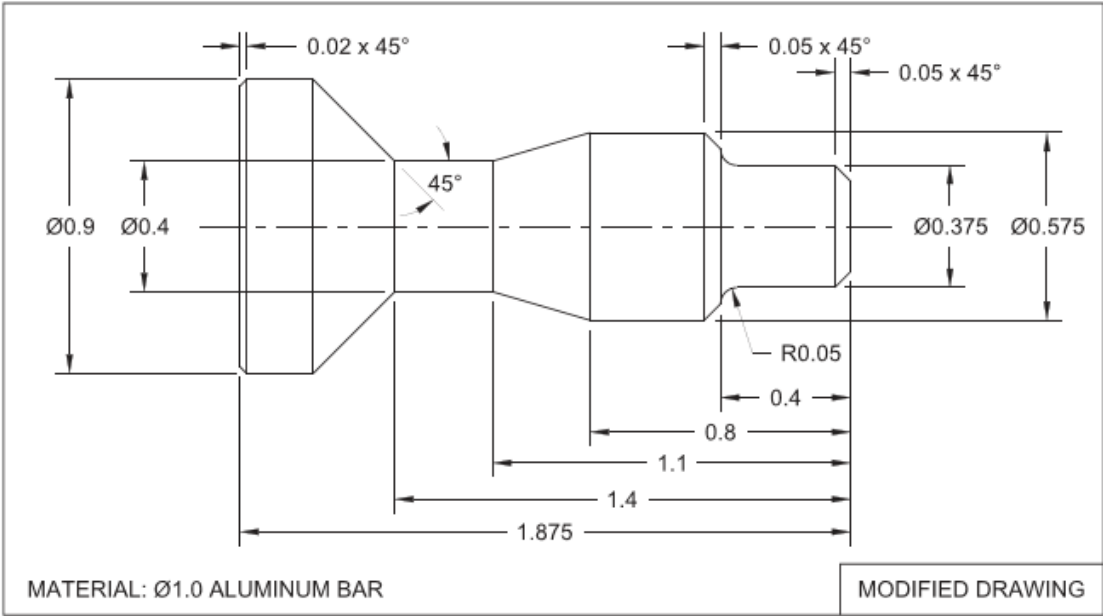


- A. Clockwise
- B. Counterclockwise
- C. Same direction as gear A
- D. Opposite direction as gear B

3. A dimension on a print is shown as 0.545/0.535. What is the upper limit of the given dimension?

- A. 0.535
- B. 0.545
- C. 0.540
- D. 0.550

4. What is the largest diameter on this aluminum bar?



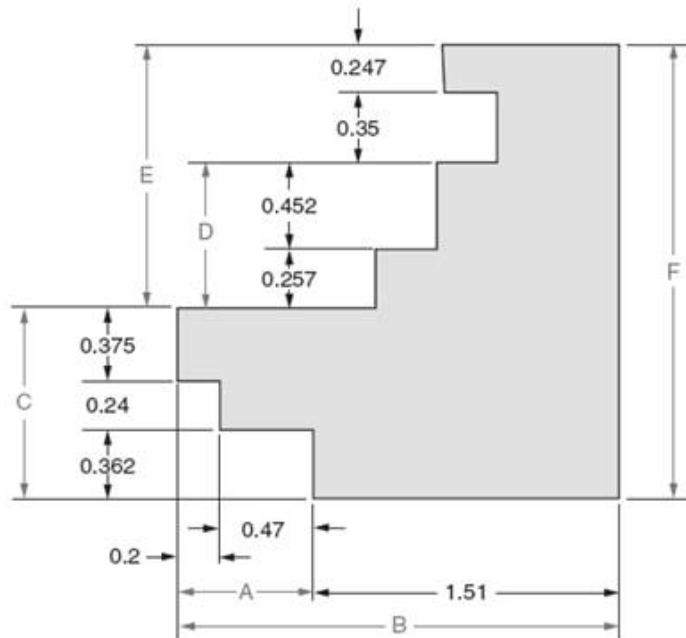
- A. 0.575
- B. 0.9
- C. 1.4
- D. 0.4

5. According to this Print Title block. What is the material required for this part?

|  |                 |   |                  |
|--|-----------------|---|------------------|
|                   |                 | 1651 Wilkening Rd<br>Schaumburg, IL 60173<br>www.tmaillinois.org (847)-825-0041 |                  |
| OWN: CN  | DATE: 7/20/17   | SIZE: 3.000 X 4.000 X 4.000   |                  |
| SCALE: 1:1   | MATERIAL: STEEL |   | FIN: TBD         |
| TOLERANCES<br>.00 = ± .010<br>.000 = ± .002<br>.0000 = ± .0005<br>IR = ± .0005<br>DEGREES = ± 1/2° |                 | DRAWING FILE NO:<br><b>Angle Plate</b>  | REV:<br><b>A</b> |

- A. TBD  
B. Steel  
C. CRS  
D. Copper
6. Express  $9/7$  as a mixed number
- A.  $7/9$   
B.  $1\ 1/9$   
C.  $1\ 1/7$   
D.  $1\ 2/7$
7.  $7/8 - 1/4 =$

- A.  $1/4$   
B.  $3/8$   
C.  $1/2$   
D.  $5/8$



8. In the accompanying figure, what is the length of dimension E? All dimensions are in inches.

- A. 1.603
- B. 1.306
- C. 1.357
- D. 1.426

9. Express  $\frac{1}{5}$  as a percent

- A. 20%
- B. 25%
- C. 40%
- D. 50%

10.  $\frac{1}{2} + \frac{3}{8} - \frac{1}{5} =$

- A.  $\frac{1}{20}$
- B.  $\frac{9}{10}$
- C.  $\frac{4}{5}$
- D.  $\frac{27}{40}$

11. What is the lowest common denominator of  $\frac{1}{2}$ ,  $\frac{3}{4}$ , and  $\frac{2}{5}$ ?

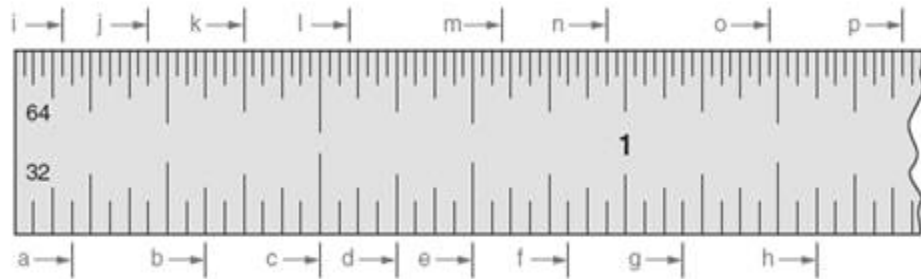
- A. 2
- B. 13
- C. 11
- D. 20

12. Solve and round to four decimal places,  $4.699 \times 1.011 =$

- A. 4.1123
- B. 4.7506
- C. 4.7507
- D. 4.3827

13. The \_\_\_\_\_ denominator is the smallest denomination that is evenly divisible by each of the denominators of the fractions being added.

- A. Lowest common
- B. Whole number
- C. Mixed number
- D. None of the above



14. Read measurement M on the fractional-inch rule shown in the accompanying figure.

- A.  $\frac{3}{4}$
- B.  $\frac{49}{64}$
- C.  $\frac{25}{32}$
- D.  $\frac{51}{64}$