CAE-II- Unit 3-Interpret-Read-Blueprints-GD&T-COORDINATES

Computer Aided Engineering

1. Email address *

   _____

2. First Name *

   _____
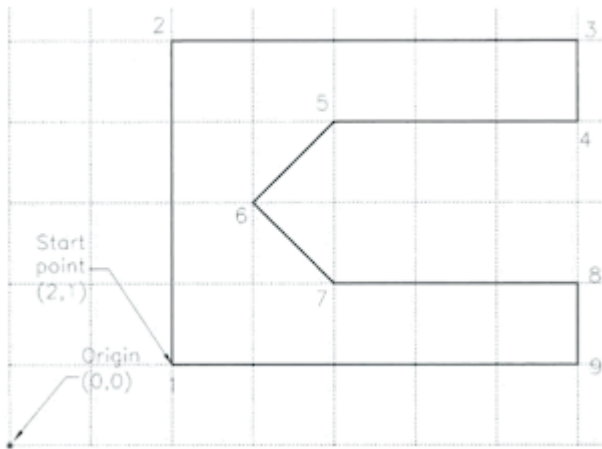
3. Last Name *

   _____

4. Email *

   _____

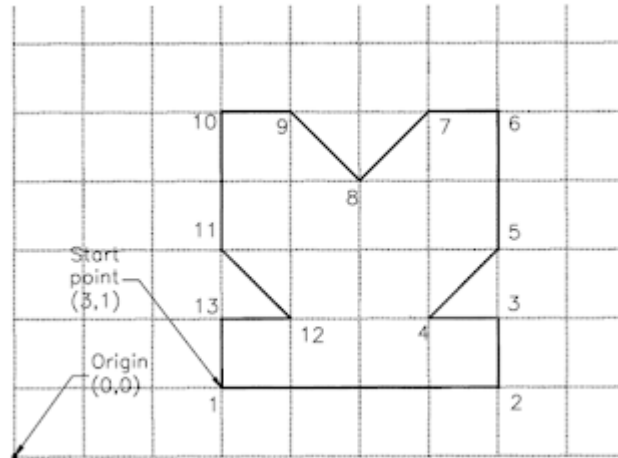5. The Absolute Coordinate of point 6 is *

Mark only one oval.

- [ ] X=-3 Y= -3
- [ ] X= -1 Y= 1
- [ ] X=3 Y= 3
- [ ] X= 1 Y= 2

6. The RELATIVE Coordinate of point 8 is *
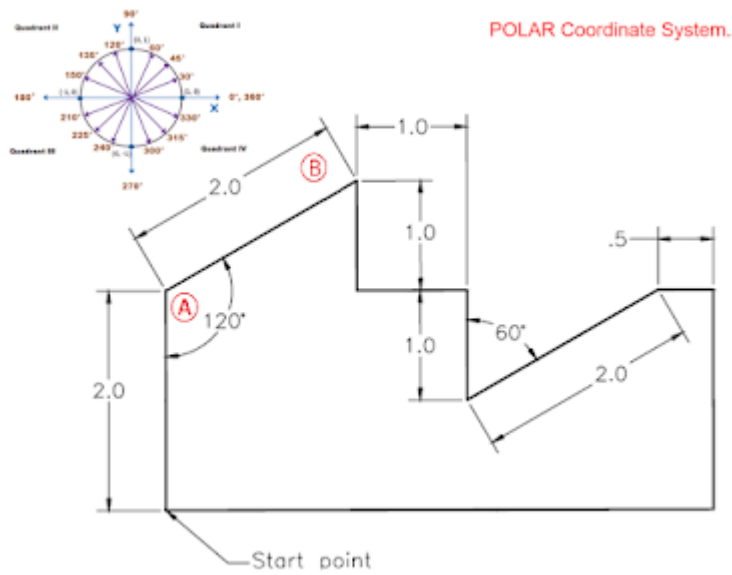

Mark only one oval.

- ( ) X=-1 Y= -1
- ( ) X= 1 Y= 1
- ( ) X= 5 Y= 4
- ( ) X= 4 Y= 5

7. From point "A", what is the polar coordinate of point "B" ? *

POLAR Coordinate System.
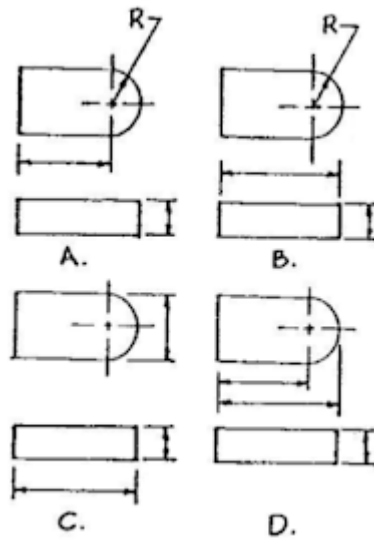

Mark only one oval.

- @ 2 < -30
- @ 2 < 30
- @ 2 < 120
- @ 2 < 60

8. The best example of dimensioning the object shown is: *

A.   B.

C.   D.

Mark only one oval.

- A
- B
- C
- D

9. Which of the following is a form of limit dimensioning? *

```
                    +.01
        A.  2.00    -.01

                    +.00
        B.  2.00    -.02

        C.  2.01
            1.99

                    +.001
        D.  2.000   -.0001
```

Mark only one oval.

- A
- B
- C
- D

10. The total allowable variation in part size when dimensioned as 2.150+ .005 is *

Mark only one oval.

- A. five thousandths
- B. ten thousandths
- C. fifteen thousandths
- D. twenty thousandths

11. The smallest acceptable diameter of a shaft when dimensioned as 1.0625+ .0004 is
*

Mark only one oval.
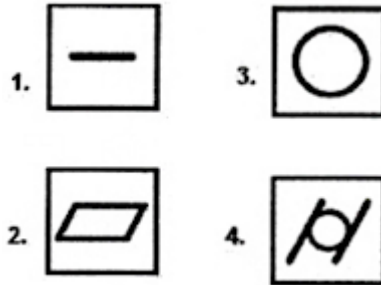
○ A. 1.0615

○ B. 1.0620

○ C. 1.0621

○ D. 1.0630

12. The tolerance shown below is an example of ____ dimensioning *

$$4.50 \; {}^{+.00}_{-.05}$$

Mark only one oval.

○ bilateral

○ unidirectional

○ unilateral

○ trilateral

13. Which symbol represents "Straightness"? *

1. ⊟
3. ◻
2. ▱
4. ⌀

Mark only one oval.

○ A. 1
○ B. 2
○ C. 3
○ D. 4

14. Which symbol below represents "Concentricity"? *

1. ⌀
3. ◎
2. ○
4. ◠
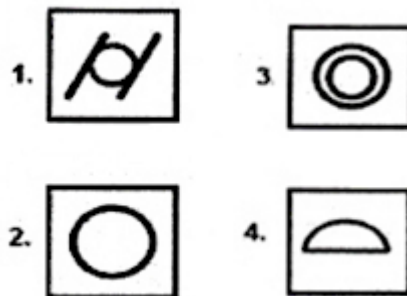
Mark only one oval.

○ 1
○ 2
○ 3
○ 4

15. Which symbol below represents "Profile"? *

1. ▱ (rectangle in box)
3. ⌀ with slash (in box)
2. ◠ (half circle in box)
4. ⊕ (in box)
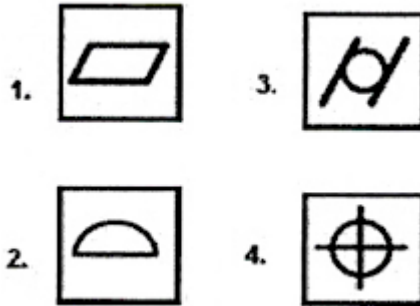
Mark only one oval.

- A. 1
- B. 2
- C. 3
- D. 4

16. Which symbol below represents "Total Runout"? *

1. ↗ (arrow in box)
3. // (in box)
2. ⌀ with slash (in box)
4. ⫫ (double arrows in box)
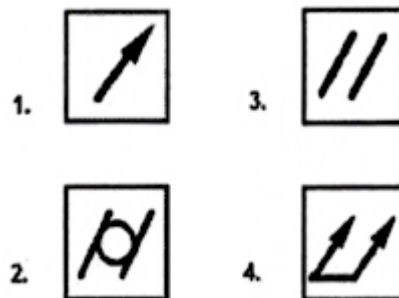
Mark only one oval.

- A. 1
- B. 2
- C. 3
- D. 4

17. A center line is represented by *

(1) ₵   (3) R

(2) Ø   (4) ↨

Mark only one oval.

- A. 1
- B. 2
- C. 3
- D. 4

18. A surface finish symbol is represented by *

(1) ₵   (3) √‾

(2) Ø   (4) ⊥

Mark only one oval.

- A. 1
- B. 2
- C. 3
- D. 4

19. Symbolic representation for diameter is *

A. ∅   C. ⊖

B. ⊖   D. ∅
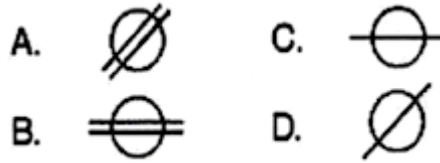
Mark only one oval.

○ A

○ B

○ C

○ D

20. Which of the following is a center line? *

A. — — — — — — — — — —

B. ——— — — ———

C. ·················

D. ——— – ———

Mark only one oval.

○ A

○ B

○ C

○ D

21. An angle is represented by *

(1)]   (3) /

(2) ∠   (4) ∧

Mark only one oval.
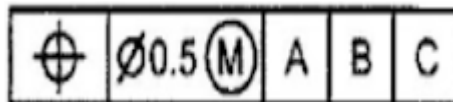
- A. 1
- B. 2
- C. 3
- D. 4

22. Coordinates for a drawing may be entered by *

Mark only one oval.

- using the drop and drag method
- inputting the values directly from the keyboard
- inputting values using the stretch command
- inserting values through the use of the offset command

23. The geometric characteristics below is *

⊕ ∅0.5 Ⓜ A B C

Mark only one oval.

- Circularity
- Total Runout
- Cylindricity
- Position

24. Which GD&T symbol does the image below represent? *

Mark only one oval.

$\bigcirc$ Cylintricity

$\bigcirc$ Circularity

$\bigcirc$ Position

$\bigcirc$ Concentricity

25. Which GD&T symbol does the image below represent? *

Mark only one oval.

$\bigcirc$ Angularity

$\bigcirc$ Concentricity

$\bigcirc$ Profile of a surface

$\bigcirc$ Circularity

26. The absolute coordinates of hole "A" are *
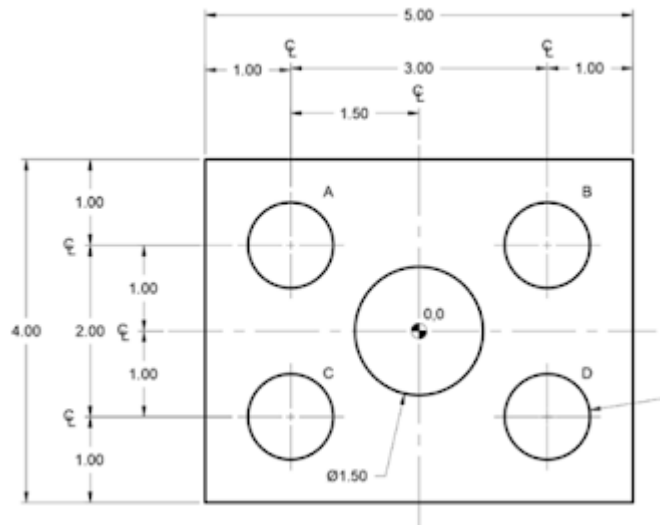
Mark only one oval.

⭕ X= -3.000; Y= -2.000

⭕ X= -1.500; Y= 1.000

⭕ X= 1.500; Y= -1.000

⭕ X= 3.000; Y= 2.00

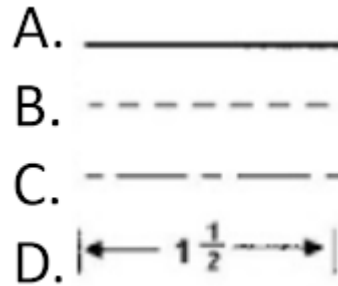27. Which GD&T symbol does the image below represent? *

Mark only one oval.

⭕ Runout

⭕ Total Runout

⭕ Profile of a Line

⭕ Flatness

28. The line coordinates (0,0), (2,0), (2,4), (0,4), and (0,0) describe a *

Mark only one oval.

○ Circle

○ rectangle

○ square

○ 3-D square

29. Which line represents a center line

A. ————————————

B. – – – – – –

C. – —— – —— –

D. |←— $1\frac{1}{2}$ —→|

Mark only one oval.

○ A.

○ B.

○ C.

○ D.

30. Which of the following lines is used for hatching, leader lines, dimensions, and projections? *
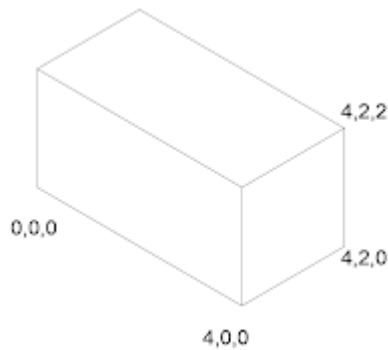
Mark only one oval.

○ Chain Lines

○ Thick Lines

○ Thin lines

○ Dashed Lines

31. Which of the following is the numerical value that defines the size and geometric characteristics of a feature? *

Mark only one oval.

○ tolerance

○ arrow

○ dimension

○ blind hole

32. What is the total surface area of the object shown below (including the visible and non visible sides)? *

Mark only one oval.

○ 24

○ 32

○ 48

○ 54