This is a Class 1 exam

Lebanon Evangelical School
for Boys and Girls
Loueizeh - Baabda

SE02 Exam

15DEC2025

Do NOT write in this box. Your MARK will be placed here.

Subject :	Maths
Class :	7E
Teacher :	Rami Bou Karroum
Duration :	1 hour

Calculators are not allowed.

You are to answer the questions to this exam on : Squared paper

Your name :		*Time taken to complete exam*
Your Class :		
Exam Room :		
How many sheets, including cover sheet :		

- Do not open this paper until the teacher in charge instructs you to do so.
- The most important thing to remember in taking an exam is NEVER PANIC.
- If you are caught cheating in this exam, you will be awarded zero for ALL exams that are taken on this day.

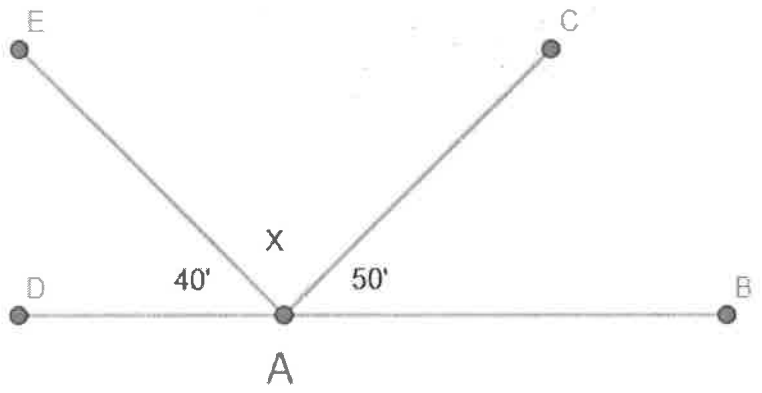
Write all of your solutions **neatly** on a separate paper unless stated otherwise.
Show your steps. Calculators are not allowed.

I- Algebra (7 points)

a) Find the GCF of 40, 60 and 100 using prime factorization.

b) Find the LCM of 12 and 20 using prime factorization.

II- In the figure below, $\widehat{CAB} = 50°$ and $\widehat{DAE} = 40°$ (3 points)



a) Find x.

b) What is the nature of $\widehat{CAE}$?

c) Name two adjacent angles.

III- Coordinate Plane (6 points)

a) Draw an orthonormal system, and label the axes.

b) Locate the following points:

P (−5, 0); Q (2, 4); R (1, −2); S (-2 , -3)

c) Indicate to which quadrant or axis each point belongs.

d) Locate points I and J the orthogonal projection of Q and S respectively ox x'x.

Find the coordinates of I and J.

e) Find the coordinates of point M the midpoint of [PR]

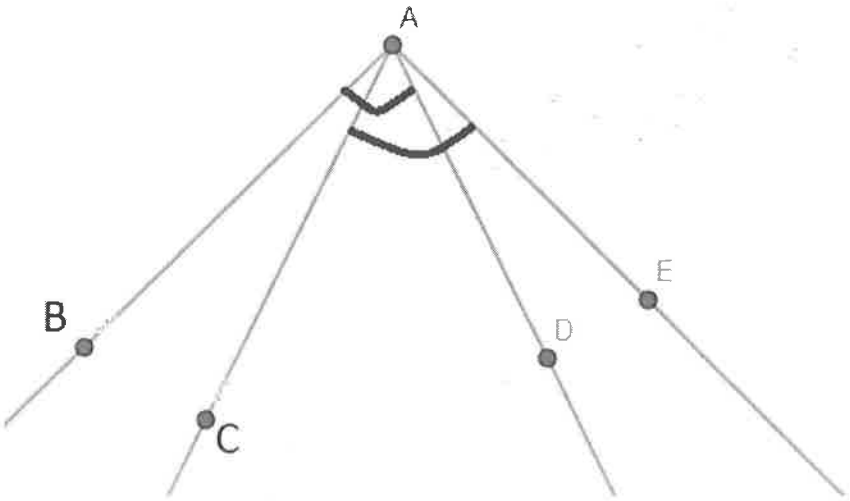
IV- Circles **(Do not draw Circles)** (3points)

a) Find the circumference of a circle with diameter 10 cm.

b) Calculate the area of circle with radius 2 cm.

V- In the figure below $\widehat{BAD} = \widehat{CAE}$. (4 points)

Show that $\widehat{BAC} = \widehat{DAE}$.



SEO2 7E Math solution.

I- a) (0.5)

40	2
20	2
10	2
5	5
1	

(0.5)

60	2
30	3
10	2
5	5
1	

(0.5)

100	2
50	2
25	5
5	5
1	

$40 = 2^3 \times 5$ (0.5)

$60 = 2^2 \times 3 \times 5$ (0.5)

$100 = 2^2 \times 5^2$ (0.5)

$GCF = 2^2 \times 5 = 20$ (1)

b) (0.5)

12	2
6	2
3	3
1	

(0.5)

20	2
10	2
5	5
1	

$12 = 2^2 \times 3$ (0.5)

$20 = 2^2 \times 5$ (0.5)

$LCM = 2^2 \times 3 \times 5 = 60$ (1)

II- a) $40 + x + 50 = 180$ (0.5)

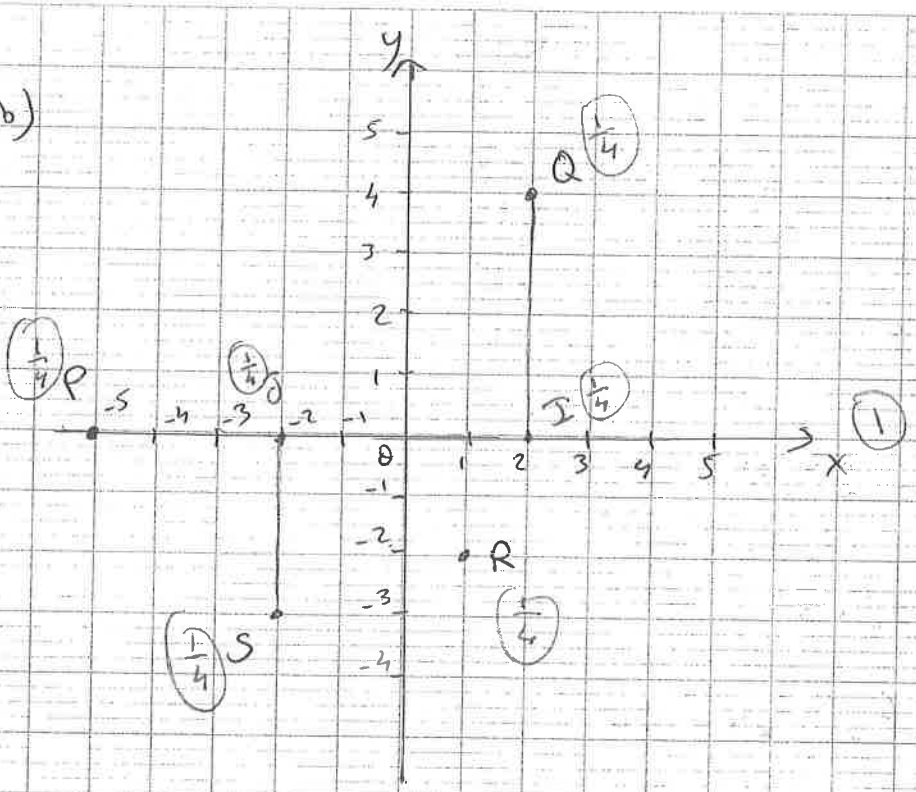
$x = 90$ (0.5)

b) $C\hat{A}E$ is a right angle (1)

c) $D\hat{A}E$ and $E\hat{A}C$ (1)

III

a+b)



c) P ; x axis Q : Quadrant 1 (1)
R ; Q 4 S ; Q 3.

d) I (2 , 0) (1/4)
J (-2 , 0) (1/4)

e) $x_M = \frac{x_P + x_R}{2} = \frac{-5+1}{2} = \frac{-4}{2} = -2$ (1)

$y_M = \frac{y_P + y_R}{2} = \frac{0+(-2)}{2} = -\frac{2}{2} = -1$ (1)

so M (-2 , -1)

IV a) $d = 10\,cm \rightarrow r = 5\,cm$ (0.5)

$C = 2\pi r = 2 \times 3.14 \times 5 = 31.4\,cm$ (0.5) (0.5)

b) $A = \pi r^2 = 3.14 \times 2^2 = 12.56\,cm^2$

(0.5) (0.5) (0.5)

V.

(0.5) $\begin{cases} B\hat{A}C = B\hat{A}D - C\hat{A}D \\ D\hat{A}E = C\hat{A}E - C\hat{A}D \end{cases}$ (0.5)

(0.5) $B\hat{A}D = C\hat{A}E$ (Given) (0.5)

(0.5) $C\hat{A}D = C\hat{A}D$ (common angle) (0.5)

by comparison $B\hat{A}C = D\hat{A}E$

(0.5) (0.5)