This is a Class 1 exam

Lebanon Evangelical School
for Boys and Girls
Loueizeh - Baabda

Stage Exam 04

12FEB2024

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

Subject :	Maths
Class :	6A, 6B, and 6E
Teacher :	Ms. Dalida Jammal
Duration :	1 hour

_Answer on the question sheet.
_You need a compass, a ruler, and a protractor.
_ Clearly label all angles, points, and segments.
_Use a pencil when you are constructing triangles.
_ Neatness and clarity are a must.

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.

I. Use the divisibility rules to fill in the table. Put a check mark ✓ in the box if the given number is divisible and "X" if it is NOT divisible. [6 marks]

	2	3	5	6	9	10
105						
660						

II. Find the prime factorization of the following numbers and write each number as a product of prime numbers. [8 marks]

1. 288

2. 96

III. Find the G.C.F of 28 and 48. [3 marks]

IV. Write each decimal as a fraction in lowest terms. [4 marks]

1. 0.75 =

2. 0.515 =

V. Write each fraction as a decimal. State whether the decimal terminates or repeats. [4 marks]

1. $\frac{6}{5}$

2. $\frac{8}{9}$

VI. Subtract each expression. Write each answer in the lowest terms. [8 marks]

a. $6\frac{5}{9} - 4\frac{2}{3} =$

b. $8\frac{5}{7} - 2\frac{1}{4} =$

VII. Add each expression. Write each answer in the lowest terms. [6 marks]

a. $3\frac{4}{5} + 10\frac{1}{2} =$

b. $5\frac{3}{4} + 1\frac{7}{8} =$

VIII. Cynthia is a florist. She bought $5\frac{1}{5}$ meters of wire. She used $4\frac{2}{3}$ meters for all her floral arrangements. How much wire is left? Show all your work. [4 marks]

IX. Construct each of the following triangles: (Draw with a pencil and don't erase the arcs)

1. Construct triangle ABC such that: AB = 5 cm, AC = 3.5 cm, BC = 4 cm. [3 marks]

2. Construct triangle DEF such that: EF = 7 cm, $D\hat{E}F = 60°, and\ D\hat{F}E = 70°$

   Also calculate the measure of angle $F\hat{D}E$. [4 marks]

Solution for SE04
Maths 6ABE - 20232024

I

	2	3	5	6	9	10
105	X	✓	✓	X	X	X
660	✓	✓	✓	✓	X	✓

(0.5 each)

II

①

288	2
144	2
72	2
36	2
18	2
9	3
3	3
1	

$288 : 2^5 \times 3^2$

(0.5 each)

②

96	2
48	2
24	2
12	2
6	2
3	3
1	

$96 : 2^5 \times 3$

(0.5 each)

III

28	48	2 (1)
14	24	2 (1)
7	12	

GCF(28,48) = 2 × 2 = 4 (1)

IV

(1) $0.75 = \frac{75 \div 5}{100 \div 5} = \frac{15 \div 5}{20 \div 5} = \frac{3}{4}$ (1) (1)

(2) $0.515 \quad \frac{515 \div 5}{1000 \div 5} = \frac{103}{200}$ (1) (1)

V (1) $\frac{6}{5} = 1.2$

$$\begin{array}{r} 1.2 \\ 5\overline{)60} \\ -5 \\ \hline 10 \\ -10 \\ \hline 00 \end{array}$$ (1) terminates (1)

(2) $\frac{8}{9} = 0.\overline{8}$

$$\begin{array}{r} 0.888 \\ 9\overline{)180^{10}} \\ -72 \\ \hline 080^{10} \\ -72 \\ \hline 080^{10} \\ -72 \\ \hline 8 \end{array}$$ (1) (1) repeats

VI a- $6\frac{5}{9} - 4\frac{2\times3}{3\times3}$ (1)

$6\frac{5}{9} - 4\frac{6}{9}$ (1)

$5 \quad 1$

$5\left(\frac{9}{9}+\frac{5}{9}\right) - 4\frac{6}{9}$ (1)

(1) $5\frac{14}{9} - 4\frac{6}{9} = 1\frac{8}{9}$ (1)

(5 in all)

b- $8\frac{5\times4}{7\times4} - 2\frac{1\times7}{4\times7}$ (1)

$8\frac{20}{28} - 2\frac{7}{28}$ (1)

$6\frac{13}{28}$ (1)

(3 in all)

VII a- $3\frac{4\times2}{5\times2} + 10\frac{1\times5}{2\times5}$ (1)

$3\frac{8}{10} + 10\frac{5}{8} = 13\frac{13}{10}$ (1)

$13 + 1\frac{3}{10} = 14\frac{3}{10}$ (1)

$$\begin{array}{r|l} & 1 \\ \hline 10 & 13 \\ & -10 \\ \hline & 3 \end{array}$$

(3 in all)

3 of 5

b. $5\ \frac{3\times2}{4\times2} + 1\ \frac{7}{8}$ (1)

$5\ \frac{6}{8} + 1\ \frac{7}{8}$

$6\ \frac{13}{8}$ (1)

$6 + 1\ \frac{5}{8} = 7\ \frac{5}{8}$ (1)

$8\overline{)13}$ — 1 — -8 — 5 — $1\ \frac{5}{8}$

(3 in all)

VIII $5\ \frac{1\times3}{5\times3} - 4\ \frac{2\times5}{3\times5}$ (1)

(1) $5\ \frac{3}{15} - 4\ \frac{10}{15}$

4 and 1

$4\ (\frac{15}{15} + \frac{3}{15}) - 4\ \frac{10}{15}$

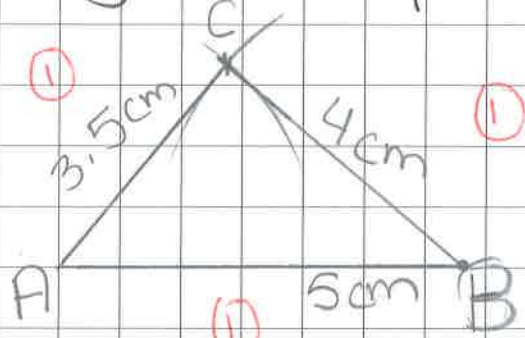
$4\ \frac{18}{15} - 4\ \frac{10}{15} = \frac{8}{15}$ (1)

(4 in all)

$\frac{8}{15}$ meters were left from the wire (1)

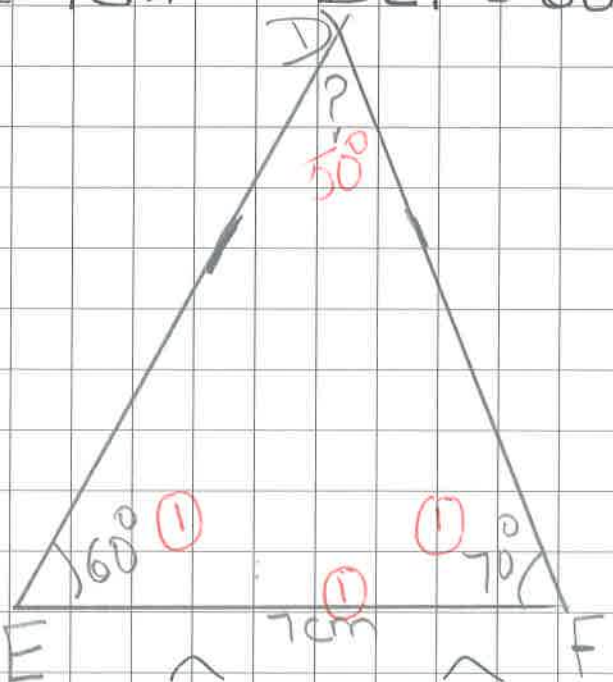
4 of 5

IX ① AB = 5cm AC = 3.5cm BC = 4cm
(using a compass)



① ① ① (3 in all)

② EF = 7cm $\hat{DEF} = 60°$ $\hat{DFE} = 70°$



① ① ① (4 in all)

$\hat{DEF} + \hat{DFE} + \hat{FDE} = 180°$
$60° + 70° + ? = 180°$
$130° + ? = 180°$
$\hat{FDE} = 180° - 130°$
$\hat{FDE} = 50°$ ①