This is a Class 1 exam

Lebanon Evangelical School for Boys and Girls

Lebanon Evangelical School
for Boys and Girls Loueizeh - Baabda

Stage Exam 04

20-25JUN2025

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

Write your answers on the question worksheet.
Use a ruler, compass, set square, and a protractor when needed.
Keep your papers well organized and tidy.
Use a separate scratch paper.

You are to answer the questions to this exam on : This exam 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.

Solve the following exercises.

Part 1 _ Algebra

I) A bag has 6 red marbles, 5 blue marbles, 3 yellow marbles, and 8 green marbles. Make sure to give each ratio in 3 ways. (1.5 points each)

1) What is the ratio of blue marbles to red?	2) What is the ratio of yellow to all marbles?

II) Give two ratios equal to the given ratio. (2 points each)

1) 7 to 14	2) A pet store has 5 cat collars for every 8 dog collars.

III) State if the ratio is a unit rate. (1 point each)

1) $\frac{2\ cups}{1\ liter}$ _____

2) $\frac{1\ table}{6\ chairs}$ _____

IV) Solve each proportion. (1 point each)

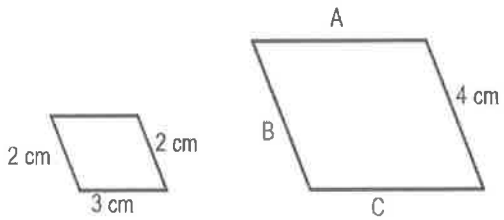
1) $\frac{12}{x} = \frac{16}{20}$	2) $\frac{3}{x} = \frac{2}{8}$

V) Find the unit rate for each. (1 point each)

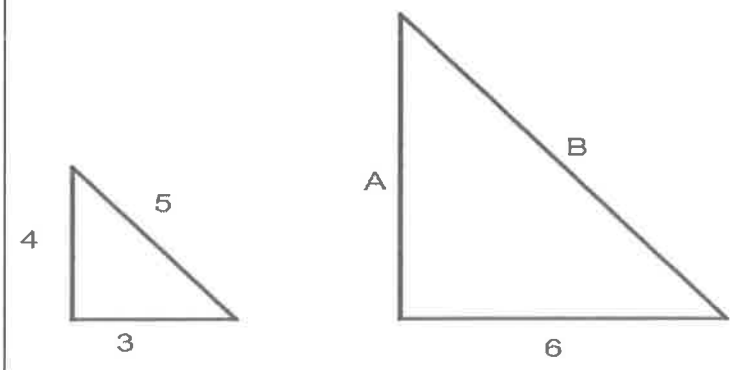
1) $\frac{6\ km}{2\ min}$	2) $\frac{30\ dogs}{6\ cats}$

VI) Find the missing side lengths. (2 point each)

1)



2)



VII) Convert to a fraction in lowest term. (1 point each)

1) 30% _____

2) 12% _____

VIII) Convert to a percent. (1 point each)

1) 0.41 _____

2) $\frac{7}{10}$ _____

IX) Simplify. (1 point each)

1) 3% of 15	2) 15% of 30

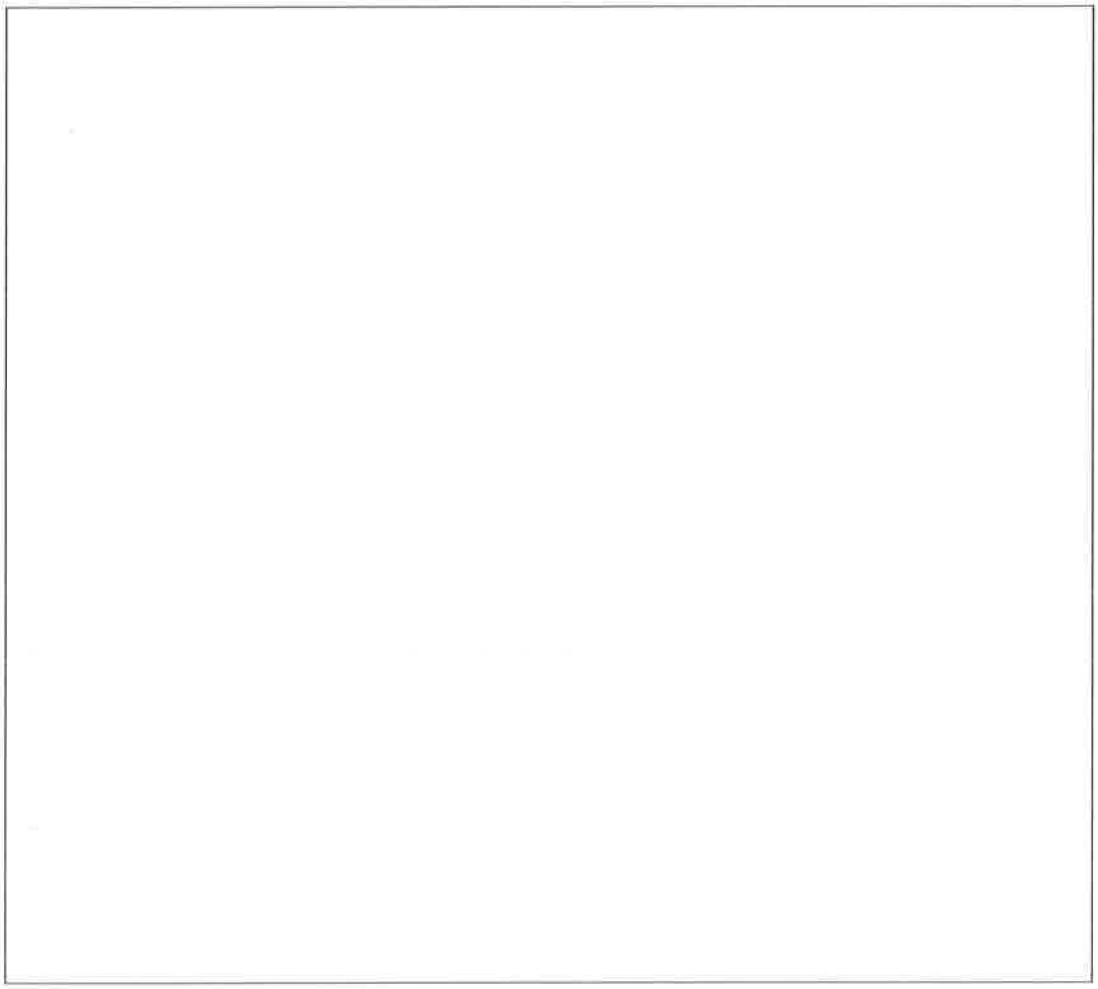
X) Find the total amount. (1 point each)

1) 16 % of _____ is 12	2) 8 % of _____ is 16

Part 2_ Geometry:

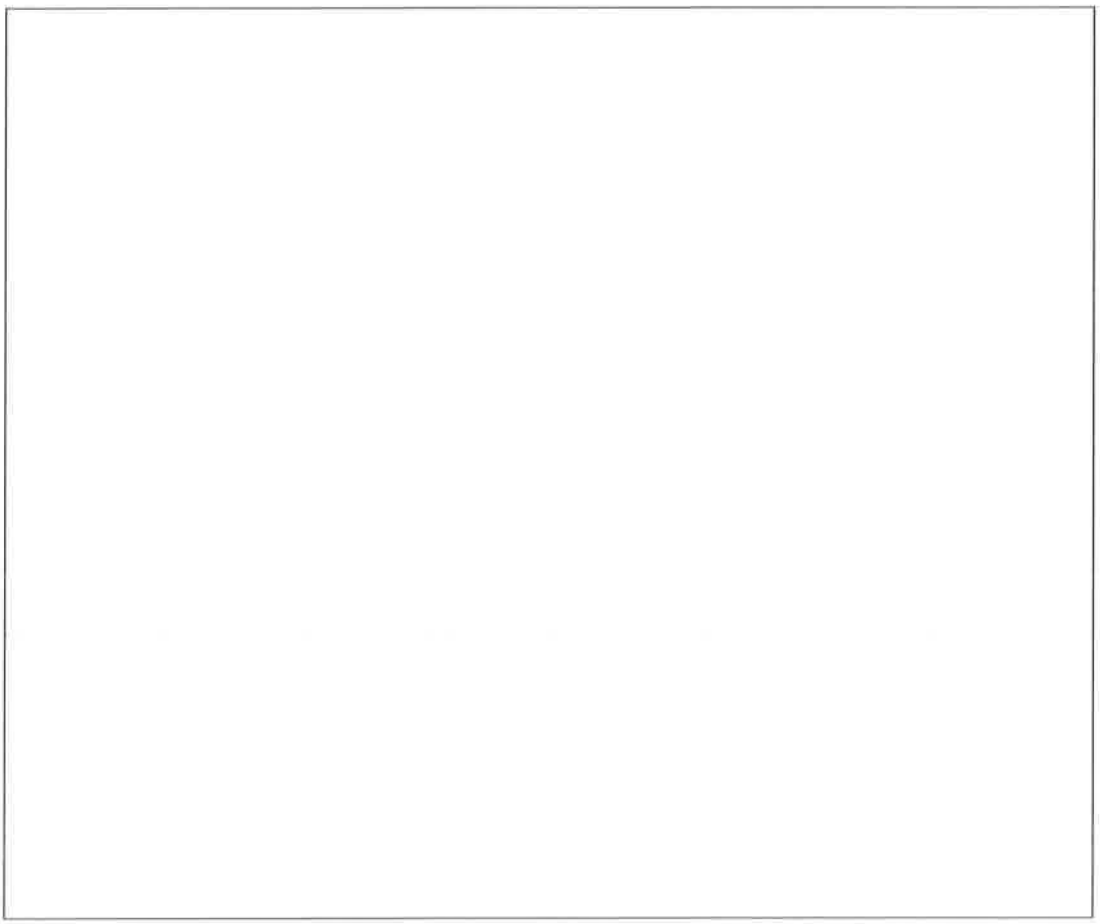
I)

1) 1) Construct a triangle DEF such that: EF= 5cm, $\widehat{DEF} = 50º, \widehat{DFE} = 60º$.
2) Draw the perpendicular bisectors of the sides [DE], [EF], and [DF]. These 3 perpendicular bisectors intersect in O.
3) Verify that OE = OF



II)

1) Construct triangle SON. Side ON= 4cm, SO = 5 cm, SN = 6cm. (Use a compass)
2) M is the midpoint of the side [SO]. [NM] is a median.
3) Draw the other 2 medians. Name them [OF] and [ST].
4) Do the 3 medians intersect at the same point? _____



Solve the following exercises.

Part 1 _ Algebra

I) A bag has 6 red marbles, 5 blue marbles, 3 yellow marbles, and 8 green marbles. Make sure to give each ratio in 3 ways. (1.5 points each)

1) What is the ratio of blue marbles to red?	2) What is the ratio of yellow to all marbles?
5 to 6 (0.5 pts) 5 : 6 (0.5) $\frac{5}{6}$ (0.5)	3 to 22 (0.5) 3 : 22 (0.5) $\frac{3}{22}$ (0.5)

II) Give two ratios equal to the given ratio. (2 points each)

1) 7 to 14	2) A pet store has 5 cat collars for every 8 dog collars.
1 to 2 (1) 14 to 28 (1)	5 : 8 10 : 16 (1) 15 : 24 (1)

III) State if the ratio is a unit rate. (1 point each)

1) $\frac{2\ cups}{1\ liter}$ Yes (1)

2) $\frac{1\ table}{6\ chairs}$ no (1)

IV) Solve each proportion. (1 point each)

1) $\frac{12}{x} = \frac{16}{20}$ ÷4 ÷4	2) $\frac{3}{x} = \frac{2}{8}$ ÷2 ÷2
$\frac{12}{x} = \frac{4}{5}$ $4x = 60$ $x = 15$ (1)	$\frac{3}{x} = \frac{1}{4}$ $x = 12$ (1)

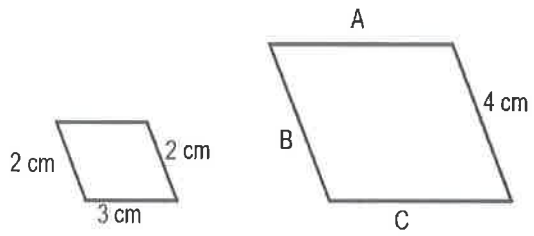
V) Find the unit rate for each. (1 point each)

1) $\frac{6\ km \div 2}{2\ min \div 2} = \frac{3km}{1min}$ (1)

2) $\frac{30\ dogs \div 6}{6\ cats \div 6} = \frac{5dogs}{1cat}$ (1)

VI) Find the missing side lengths. (2 point each)

1)



B = 4cm (2)

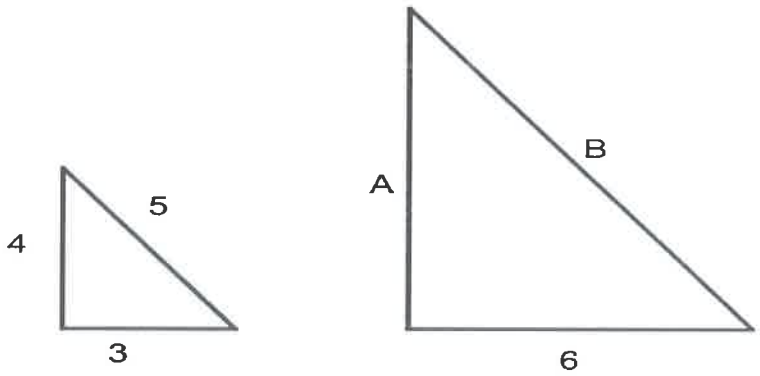
$\frac{3}{C} = \frac{2 \div 2}{4 \div 2}$

$\frac{3}{C} = \frac{1}{2}$

C = 6cm (2)

A = 6cm (2)

2)



$\frac{4}{A} = \frac{3 \div 3}{6 \div 3}$

$\frac{4}{A} = \frac{1}{2}$

$A = 8$

(2)

$\frac{5}{B} = \frac{3 \div 3}{6 \div 3}$

$\frac{5}{B} = \frac{1}{2}$

$B = 10$

(2)

VII) Convert to a fraction in lowest term. (1 point each)

1) 30% $\frac{30 \div 10}{100 \div 10} = \frac{3}{10}$ (1)

2) 12% $\frac{12 \div 4}{100 \div 4} = \frac{3}{25}$ (1)

VIII) Convert to a percent. (1 point each)

1) 0.41 41 % (1)

2) $\frac{7}{10}$ 70 % (1)

IX) Simplify. (1 point each)

1) 3% of 15	2) 15% of 30
$\frac{3}{100} = \frac{x}{15}$ $100x = 45$ $x = 0.45$ (1)	$\frac{15}{100} = \frac{x}{30}$ $100x = 15 \times 30$ $100x = 450$ $x = 4.5$ (1)

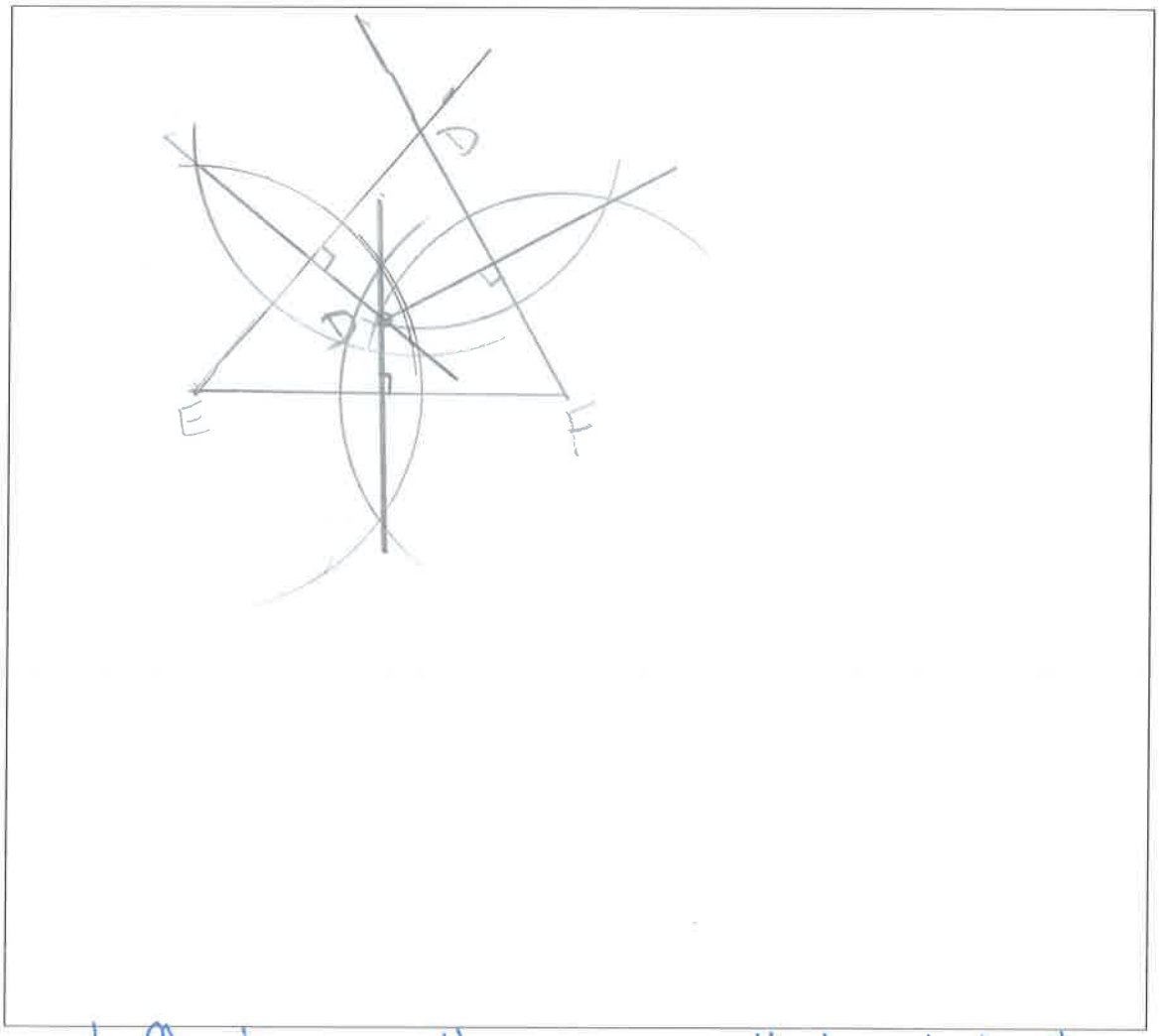
X) Find the total amount. (1 point each)

1) 16 % of _____ is 12	2) 8 % of _____ is 16
$\frac{16}{100} = \frac{12}{x}$ $16x = 12 \times 100$ $16x = 1200$ $x = 75$ (1)	$\frac{8}{100} = \frac{16}{x}$ $8x = 16 \times 100$ $8x = 1600$ $x = 200$ (1)

Part 2_ Geometry:

I) (6 points)

1) 1) Construct a triangle DEF such that: EF= 5cm, $\widehat{DEF} = 50º, \widehat{DFE} = 60º$. (2)
2) Draw the perpendicular bisectors of the sides [DE], [EF], and [DF]. These 3 perpendicular bisectors intersect in O. (3)
3) Verify that OE = OF (1)



3) O is on the perpendicular bisector of [EF] then OE = OF.

II) 5 points

1) Construct triangle SON. Side ON= 4cm, SO = 5 cm, SN = 6cm. (Use a compass) (1)
2) M is the midpoint of the side [SO]. [NM] is a median. (1)
3) Draw the other 2 medians. Name them [OF] and [ST]. (2)
4) Do the 3 medians intersect at the same point? (1) yes, they intersect at the centroid.

