Math department Subject: Math Time: 2 hours

 1^{st} term exam 2024 - 2025

Model (A)

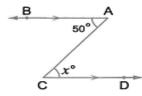
1) Choose the correct answer:

- 1) If m ($\angle B$) = 150°, then m (reflex $\angle B$) =°
 - a) 30
- b) 20
- c) 110
- d) 210

- 2) Which of the following equal 8Y?
 - a) 5 + 3Y
- b) 3 + 5Y
- c) 8+Y
- d) 3Y + 5Y

3) In the opposite figure:

What is the value of x?



- a) 40°
- b) 50°
- c) 60°
- d) 130°

- 4) From the opposite stem- and-leaf plot, What is the median?
 - a) 16

b) 17

 Stem
 Leaves

 0
 9

 1
 0 2 2 2 3 4 5 6 6

 2
 0 1 1 5 7 8 9

 3
 1 2 3

 Key
 3 | 2 means 32

c) 18

- d) 20
- 5) If $\frac{x}{20} = \frac{3}{4}$, then value of x is
 - a) 5

b) 8

- c) 10
- d) 15
- 6) The two diagonals are perpendicular and equal in
 - a) Square
- b) Rhombus
- c) Rectangle
- d) Parallelogram
- 7) If the length of drawing is 2cm and the real length 6cm, then the drawing scale is ...
 - a) 1:3
- b) 1:30
- c) 1:300
- d) 1:3000
- 8) If the point (x, 7) lies on Y-axis, then the value of 5x + 1 is
 - a) 0

b) 1

c) 5

- d) 6
- 9) The measure of each angle of regular hexagon equal°
 - a) 60
- b) 108
- c) 120
- d) 135

2) Answer the following questions:

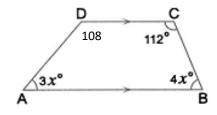
- 1) Given: $A = \{9, 6, 7, 10\}$, $B = \{8, 9, 10\}$, find:
 - a) $A \cup B$

- B) $A \cap B$
- 2) If the price of a mobile phone in a store is 12 750 L.E and its price was reduced by 8%, what will be the price after the discount?

3) In the opposite figure:

ABCD is a trapezium

find with prove the value of x



- 4) If ABCD is a rhombus where A (3,5), B (12,-3) and C (13,9), find the coordinate of the following:
 - a) the point of intersection of its diagonals.
 - b) The coordinate of point D
- 5) If the map scale in 1: 300,000 and the real distance between two cities is 720 km, how far apart they on the map?
- 6) Find in N the solution set of the equation: 3(x-2)-4x=-8?
- 7) If the ratio of Ahmed's and Mostafa's shares of the profits in a business project is 2:3 and Ahmed's share is 6000 pounds, what is Mostafa's share?