ADMISSION TEST PAPER 2024-25
SUBJECT: MATHEMATICS

## CLASS: 8

| Name: |
| :--- |
| Date: |


| Duration: 30 min |  |
| :--- | ---: |
| Marks Obtained: | 125 |

Q1. Given the equation $y=-5 x-2$, find the value of $x$ when $y=21$

Q2. Umar bought the following items from a supermarket

| Item | Quantity | Cost |
| :---: | :---: | :---: |
| oranges | 18 | 3 for 99 cents |
| apples | 2.2 kg | $\$ 1.50$ per kg |
| cabbage | 3 kg | 81 cents per kg |
| carrot | 2.2 kg | $\$ 3.40$ per kg |

Show how you estimate the total amount of money he has to pay, giving your answer as the nearest dollar.

Q3. Solve each of the following inequalities and illustrate the solution on number line.
a. $\quad 4 x>44$
b. $\frac{1}{3} y>2$

Q4. The sum of two numbers is 150 . If one of the numbers is three times the other, find the smaller number.

Q5. Consider the sequence

$$
4,9,14,19, \ldots .
$$

a) write down the next two terms of the sequence
b) find in terms of ' $n$ ', a formula for the $n$th term of the sequence
c) hence find the 15 th term

Q6. Factorise each of the following expressions completely.
a) $27 a-51$
b) $x y+2 x-5 z x y-10 x z$

## Q7. Express

a) 523.956 to the nearest whole number
b) 97.341 correct to 2 decimal places
c) 415.9560 correct to 3 significant figures

