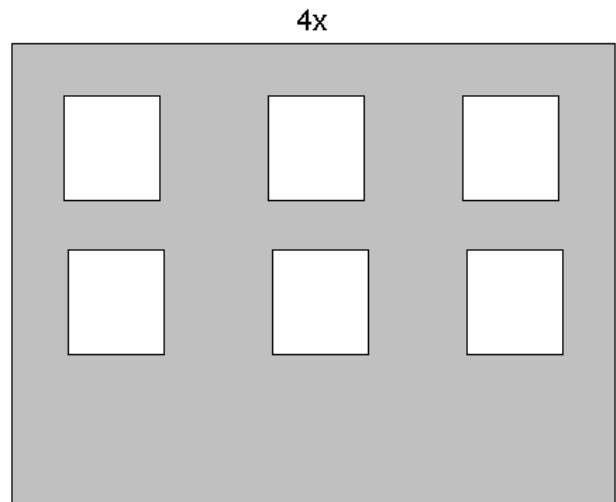


Name:

## QUIZ 6 – MATH GRADE 9

1. (5%)  $2\%$  of 390 = \_\_\_\_\_
2. (8%) Juan bought a bike for 120 Euros and sold it with 35% loss. What is the price in which he sold the bike?
3. (2%) The price of a shirt is A \$. In case the price increases by 23%, state the new price in terms of A: \_\_\_\_\_
4. (3%) The price of a shirt is B \$. In case the price decreases by 1.3%, state the new price in terms of B: \_\_\_\_\_
5. (2%) To decrease an amount by 23% we multiply it by \_\_\_\_\_
6. (20%) The price of a shirt is M\$. In case the price decreases by 70% and then increases by 60%, find:
  - a. (10%) The new price in terms of M written as a simplified fraction and decimal
  - b. (10%) The overall change in price in percent.

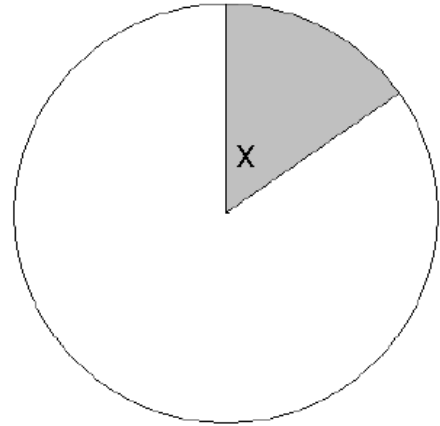
7. (30%) Given the following diagram of a façade of a building. The height of the building is 40% of its width  $4x$  as seen on diagram. The square windows have side length 90% less than the width of the building. Diagram not to scale.
- a. (5%) Find the area of the entire façade.
  - b. (5%) Find the area of each window
  - c. (10%) Find the percentage of the area that is shaded and not shaded.
  - d. (10%) Find the percentage by which the area shaded is bigger/smaller than the area not shaded.



8. (30%) It is known that the area shaded is 20% of 70% of the circle.

- a. (10%) Find the percentage of the circle that is shaded and not shaded. Write your answer as a fraction and decimal. (Diagram not to scale).

Shaded: \_\_\_\_\_ Not Shaded: \_\_\_\_\_



- b. (10%) Find the angle x

- c. (10%) It is known that the area shaded is  $\pi \text{ cm}^2$ . find R in its most simplified form.