

Name:

QUIZ – MATH GRADE 10

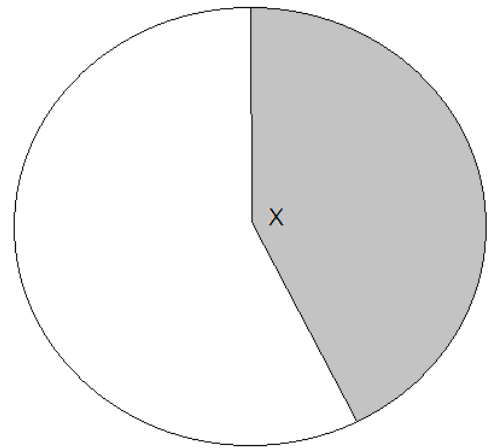
1. (10%) Juan bought a bike for 120 Euros and sold it with 35% loss. What is the price in which he sold the bike?

2. (20%) The price of a shirt is M\$. In case the price decreases by 40% and then increases by 40%, 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.

3. (25%) It is known that the area shaded is 40% of 90% 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. (5%) 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.

4. (15%) The price of a product is P\$. 16% discount is applied to the product after which the price is 105\$.

a. (10%)Find the price of the product before the discount.

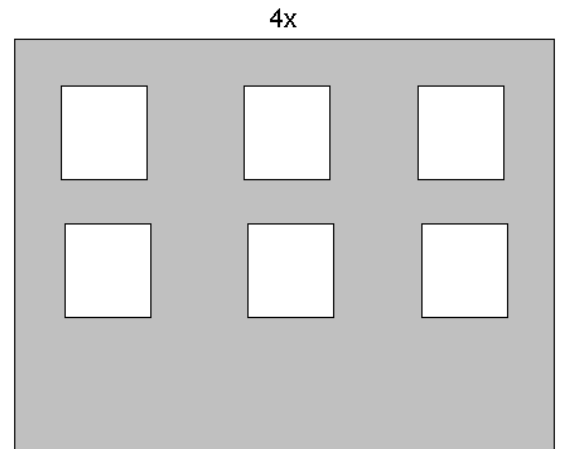
b. (5%) Find the discount

5. (30%) Given the following diagram of a façade of a building. The height h of the building is 40% of its width $4x$ as seen in the diagram. The square windows have side length 90% less than the width of the building. **Diagram not to scale.**

a. (6%) Find the area of the entire façade in terms of x .

b. (6%) Find the area of each window in terms of x

c. (6%) Find the exact percentage of the area that is shaded and not shaded.



d. (6%) Find the percentage by which the area shaded is bigger than the area not shaded, give your answer with 2 significant figures

e. (6%) Find the exact percentage by which the area not shaded is smaller than the area shaded.