

Directions: Read the following questions carefully. In each question, you will be asked to compute the given values using basic mathematical operations. Select the letter of the correct answer.

1. Fred bought three items that are priced at Php 567, Php 430, and Php 180. He paid the cashier an amount of Php 2000. How much money was left to Fred?

- (A) Php 680
- (B) Php 752
- (C) Php 823
- (D) Php 915

2. Anton plans to give $\frac{2}{3}$ of his savings to his brother. Anton's savings amounts to Php 5400. How much money will his brother receive?

- (A) Php 500
- (B) Php 1300
- (C) Php 2700
- (D) Php 3600

3. Which of the following has the least value?

- (A) $\frac{5}{6}$
- (B) 0.90
- (C) $\frac{3}{4}$
- (D) 0.80

4. Use the order of operations to simplify:

$$12 \times (27 - 2^3) \div 4$$

- (A) 79
- (B) 57
- (C) 300
- (D) 73

5. Solve for the value of m in the equation: $4m - 19 = 7m - 70$

- (A) 17
- (B) 21
- (C) 27

(D) 13

6. The weights of nine office workers have an average of 45 kilos. What is the sum of the weights of the nine office workers?

- (A) 375 kilos
- (B) 405 kilos
- (C) 475 kilos
- (D) 500 kilos

7. Compute: $-1^3 + (-2)^3 - (-1)^2$

- (A) 8
- (B) -8
- (C) 10
- (D) -10

8. A burger costs Php 32.50 while a bottle of juice drink costs Php 25.00. Suppose that Alex bought 2 burgers and 3 bottles of juice drink. How much did Alex pay for the food he bought?

- (A) Php 380.00
- (B) Php 260.00
- (C) Php 140.00
- (D) Php 50.00

9. Which of the following is NOT equivalent to $\frac{1}{3} + 2\frac{2}{5}$?

- (A) $\frac{41}{5}$
- (B) 2.7333...
- (C) $2\frac{11}{15}$
- (D) $\frac{43}{15}$

10. A piece of ribbon was divided into three parts according to a ratio of 3 : 4 : 5. If the ribbon is 150 cm long. What is the measure of the longest piece of the ribbon?

- (A) 62.5 cm
- (B) 72.5 cm
- (C) 81 cm
- (D) 92.5 cm

11. Solve for x : $\frac{5+x}{x} = \frac{-2}{3}$

- (A) 3
- (B) -3
- (C) 1
- (D) -1

12. What are values of m that will satisfy $5 + \frac{1}{m} < 3 - \frac{1}{m}$

- (A) $m < -1$
- (B) $m > -1, m \neq 0$
- (C) $m > 1$
- (D) $m < -2$

13. Suppose that $p + q = 25$ and $p \times q = 10$. Determine the value of $\frac{1}{p^2} + \frac{1}{q^2}$

- (A) $\frac{32}{10}$
- (B) $\frac{41}{20}$
- (C) $\frac{7}{30}$
- (D) $\frac{17}{4}$

14. What is 0.75% of 0.20?

- (A) 0.0010
- (B) 0.0015
- (C) 0.0020
- (D) 0.0035

15. 28 roses cost Php 420. What is the cost of three dozen roses?

- (A) Php 480
- (B) Php 540
- (C) Php 620
- (D) Php 750

16. Which of the following is NOT equivalent to 45% of 32?

- (A) 14.4
- (B) 32% of 45
- (C) 50% of 28.8

(D) 0.144×10

17. What are the factors of $2a^2 - a - 3$?

(A) $(a - 3)(2a + 1)$

(B) $(2a + 3)(a - 1)$

(C) $(a + 3)(2a - 1)$

(D) $(2a - 3)(a + 1)$

18. What is the value of $4m^2 - 3(n^3 + 2p^q)$ if $m = -1$, $n = 2$, $p = 3$ and $q = -2$

(A) $-\frac{62}{3}$

(B) $\frac{65}{4}$

(C) -2

(D) 0

19. The length of a rectangle is 5 more than twice its width. If the perimeter of the rectangle is 58 cm. What is its area?

(A) 122 sq. cm

(B) 144 sq. cm

(C) 152 sq. cm

(D) 168 sq. cm

20. Alice obtained the following grades in her Math class for the last three quarters: 89, 88 and 86. Alice is aiming to be part of her class' honor roll. To be part of it, she must achieve at least an average of 90 in her Math Class for the four quarters. What is the smallest possible grade that Alice must achieve in the fourth quarter so that she will be part of her class' honor roll?

(A) 89

(B) 92

(C) 96

(D) 97