

Mathematics 9: 1st Term Examination Reviewer

Mathematics · Answer Key · 20 Questions

1. Which term describes $\angle 2$ and $\angle 3$ when lines m and n are parallel and cut by a transversal q ?

- A) Same-side interior angles
- B) Corresponding angles
- C) Alternate interior angles**
- D) Vertical angles

2. Which pair represents corresponding angles when lines m and n are parallel and cut by a transversal q ?

- A) $\angle 2$ and $\angle 7$**
- B) $\angle 3$ and $\angle 2$
- C) $\angle 4$ and $\angle 2$
- D) $\angle 1$ and $\angle 3$

3. Which pair represents alternate interior angles when lines m and n are parallel and cut by a transversal q ?

- A) $\angle 1$ and $\angle 7$
- B) $\angle 2$ and $\angle 3$**
- C) $\angle 4$ and $\angle 8$
- D) $\angle 5$ and $\angle 7$

4. What is the relationship between $\angle 4$ and $\angle 2$ when lines m and n are parallel and cut by a transversal q ?

- A) Corresponding angles
- B) Vertical angles
- C) Same-side interior angles**
- D) Alternate interior angles

5. Two angles are complementary when their measures have a sum of:

- A) 270°
- B) 90°**
- C) 360°
- D) 180°

6. What is the sum of supplementary angles?

- A) 180°**
- B) 360°
- C) 90°
- D) 270°

7. If $m\angle 5 = 118^\circ$, what is $m\angle 7$, given that lines m and n are parallel and cut by a transversal q ?

- A) 62°
- B) 72°
- C) 118°**
- D) 180°

8. If $m\angle 4 = 132^\circ$, what is $m\angle 7$, given that lines m and n are parallel and cut by a transversal q ?

- A) 48°**
- B) 58°
- C) 132°
- D) 180°

9. Which expression correctly defines the slope of a nonvertical line?

- A) Change in x divided by change in y
- B) Change in y divided by change in x**
- C) Product of the intercepts
- D) Number of points on the line

10. In the equation $y = -2x + 7$, what is the y -intercept?

- A) -2
- B) x
- C) 7**
- D) $-2x$

11. Determine the slope of the line passing through $(-2, 8)$ and $(2, -4)$.

- A) 3
- B) -3**
- C) -2
- D) 2

12. Which equation has a slope of -3 and an x -intercept of 4 ?

- A) $y = 3x - 12$
- B) $y = -3x - 12$
- C) $y = -3x + 12$**
- D) $y = 3x + 12$

13. When solving a linear equation by setting $y = 0$, what are you finding?

- A) y-intercept
- B) Slope
- C) Range
- D) x-intercept**

14. A delivery service uses $C = 12d + 40$. What does 40 represent?

- A) The initial fee before distance is added**
- B) The cost per kilometer
- C) The total distance traveled
- D) The final delivery cost

15. A computer shop charges a fixed fee of PHP40 plus PHP10 per hour. If a student has PHP120, which equation determines h ?

- A) $40h + 10 = 120$
- B) $10h + 40 = 120$**
- C) $120h + 10 = 40$
- D) $10h - 40 = 120$

16. Using $10h + 40 = 120$, why is 8 hours the greatest possible whole-number answer?

- A) Eight hours is the first possible value.
- B) Eight hours makes the membership fee zero.
- C) Eight hours costs PHP120, while 9 hours costs more than the budget.**
- D) Eight hours gives the largest unused amount.

17. Solve: $5x + 7 = 32$

- A) 25
- B) 7
- C) 5**
- D) 3

18. Two nonvertical lines are parallel if they have:

- A) equal slopes**
- B) opposite y-intercepts
- C) reciprocal slopes
- D) slopes whose product is -1

19. Which condition guarantees that two distinct lines are perpendicular?

- A) Their slopes are equal.
- B) Their slopes have a product of -1.**
- C) Their y-intercepts are equal.
- D) Their x-intercepts are equal.

20. A line has a slope of $-\frac{3}{5}$. What is the slope of a line parallel to it?

A) $\frac{5}{3}$

B) $-\frac{5}{3}$

C) $\frac{3}{5}$

D) $-\frac{3}{5}$