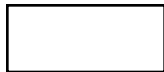


Montgomery Blair High School

Geometry Summer Review Packet



Name: _____

The problems in this packet are designed to help you review topics from previous mathematics courses that are important to your success in Geometry. Please try to do each problem and show the work that goes with that answer. Bring the packet with you to your Geometry class on the first day of school. This assignment will be evaluated as a study skill.

All work should be completed and ready to turn in on the first day of school.

Enjoy your summer. We are looking forward to seeing you in the fall.

Be sure to show all your work for the problems.

I. Determine the slope of the line through each pair of points.

1. (5, 1) and (2, 7)

2. (5, 3) and (-2, 3)

3. $(-\frac{1}{2}, -2)$ and $(-\frac{3}{2}, 1)$

4. (2, -4) and (2, 6)

II. Determine the equation for each line, using the information given.

5. slope 5, containing the point (3,2)

6. containing the points (0,2) and (2,0)

7. parallel to the line $y = -2x + 3$, containing the point (-2, -1)

III. Solve for x.

8. $5x + 3 = -12$

9. $(6x - 8) - (5x + 9) = 3$

10. $7x - 8x + 4 = 5x - 2$

11. $3(x - 2) = 18$

IV. Solve for x.

12. $(3x + 2) - 2(x + 4) = 7$

13. $\frac{x+2}{3} = \frac{8}{15}$

14. $\frac{18}{x} = 6$

15. $\frac{5}{7} = \frac{10}{y+2}$

V. Determine the area and perimeter of each figure:

16. Rectangle with length 3.6 cm and width 4.2 cm

17. Square with sides of length 9 mm

VI. Using the given information, determine each answer

18. Area and circumference of a circle with radius 4 in.

19. Area and circumference of a circle with diameter 9 in

20. Circumference of a circle with area = 36π square centimeters

VII. Simplify

21. $\sqrt{81}$

22. x^3x^6

23. $\frac{4x^5y^2}{2x^8y}$

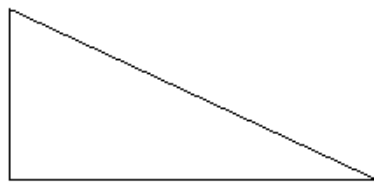
24. $(5x^3y^2)^2$

VIII. Identify each figure by name.

25.



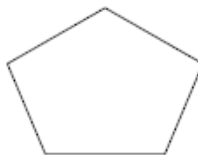
26.



27.



28.



29.



30.



IX. Solve each equation either by factoring or using the quadratic formula.

31. $x^2 + 3x = 0$

32. $x^2 - 5x - 24 = 0$

33. $3x^2 + x - 4 = 0$