Name _____

Geometry Summer Review Packet

Due the First Week of School

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 completed packet with you to your Geometry class the first week of school.

All work should be completed and ready to turn in on the first day of school. This packet will count as part of your first quarter Geometry grade.

SHOW ALL OF YOUR WORK

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)

5. (-5, 8) and (3, 8)

6. (12, -4) and (-9, -7)

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

7. Slope 5, through the point (3, 2)

8. Through the points (0, 2) and (2, 0)

9. Slope -4 and y-intercept 8

10. Parallel to the line y = -2x + 3, and through the point (-2, -1)

11. Through the points (1, 1) and (4, 13)

III. Solve the following for x.

12. $5x + 3 = -12$

13. $(6x - 8) - (5x + 9) = 3$

14. $7x - 8x + 4 = 5x - 2$

15. $3(x - 2) = 18$

16. $(3x + 2) - 2(x + 4) = 7$

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

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

19. $\frac{5}{7} = \frac{10}{x+2}$

20. $3 - 4x = 10x + 10$

21. $3(1 + x) - 5 = 3x - 2$

22. $5 - \frac{1}{2}(x - 6) = 4$

23. $4(x - 2) = 4x$

24. $18 - 3.8x = 7.36 - 1.9x$

25. $-3(2x - 5) = \frac{1}{2}(-12x + 30)$

26. $\frac{4x+5}{7} = 7$

27. $3 - \frac{5}{6}y = 2 + \frac{1}{6}y$

IV. Determine the area and perimeter of the following figures:

28. A rectangle with length 3.6cm and width 4.2 cm.

29. A square with sides of length 9mm.

30. A right triangle with sides 9, 40, and 41.

V. Using the given information, find the following:

31. Area and circumference of a circle with radius 4 inches.

32. Area and circumference of a circle with radius 12 meters.

33. Area and circumference of a circle with diameter 50 centimeters.

34. Area and circumference of a circle with diameter 26 millimeters.

35. Circumference of a circle with an area of 36π square centimeters.

38. Area of a circle with a circumference of 18π inches.

VI. Simplify the following.

39. $\sqrt{81}$ 40. $\sqrt{121}$ 41. $\sqrt{625}$