

Donovan Catholic High School
Review Packet for Incoming Geometry CP Students

All work must be shown on loose-leaf and stapled to the review.

Work will be checked on the second day of class.

Name: _____

Teacher: _____

Simplify:

1. $-3 + (-8) + 12$

2. $13 - 7 - 15$

3. $(8)(-6)(-1)$

4. $-150 \div (-6)$

5. $\frac{-5}{6} - \frac{5}{9}$

6. $-\frac{3}{8} \cdot \frac{-4}{15}$

7. $\frac{-5}{12} \div \frac{15}{36}$

8. $(-2)(2)^2$

9. $(-3)^3 (-2)^2$

10. $-15 + 23 - 8$

Solve each equation:

11. $7x - 5 = 2x - 20$

12. $-x - 4 = -3x - 16$

13. $5x + 2(3x + 1) = 3x + 5$

14. $5[2 - (2x - 4)] = 2(5 - 3x)$

15. $4(x + \frac{1}{2}) = 8(x + \frac{3}{4})$

16. $7x - 2(x + 6) = -2$

17. $\frac{x+3}{12} = \frac{5}{6}$

18. $\frac{9}{x+2} = \frac{3}{x-2}$

19. $\frac{x}{3} + \frac{4}{5} = 2x - \frac{5}{6}$

Solve AND graph on a number line:

20. $8x \leq 7x - 4$

21. $-3x + 7 < 2$

22. $7 - \frac{1}{2}x \leq 1$

23. $6x + 3 < 2x + 15$

For each equation below, identify the slope and the y-intercept. If necessary, rewrite the equation in slope-intercept form ($y = mx + b$):

24. $3x + 2y = 8$

25. $y = -2x + 7$

26. $x = 3$

27. $y = 3$

28. $x + y = 3$

Given the two points, use the slope formula ($\frac{y_2 - y_1}{x_2 - x_1}$) to find the slope:

29. (5, -1) and (3, 2)

30. (-3, -6) and (9, 2)

31. (7, 3) and (-2, 5)

32. (7, 2) and (7, 5)

33. (0, -1) and (2, -1)

Write an equation for the line connecting the points:

[The points given are the same as in #29 – 33]

34. (5, -1) and (3, 2)

35. (-3, -6) and (9, 2)

36. (7, 3) and (-2, 5)

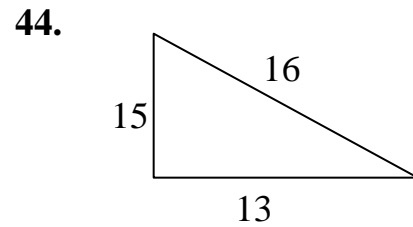
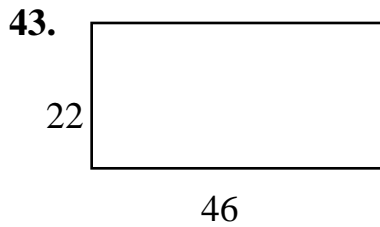
37. (7, 2) and (7, 5)

38. (0, -1) and (2, -1)

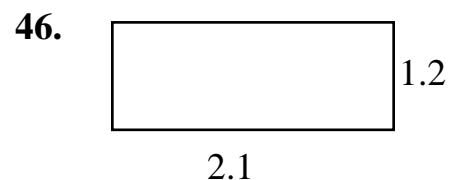
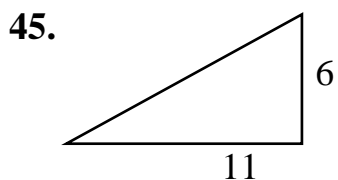
Find the slope using the given information:

39. Given the equation, $y = 3x + 7$, what is the slope of a line parallel to this line?
40. Given the equation, $2x + y = 8$, what is the slope of a line perpendicular to this line?
41. What is the slope of a line that is parallel to a vertical line?
42. What is the slope of a line perpendicular to a horizontal line?

Find the Perimeter:

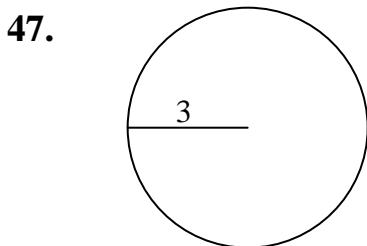


Find the Area:



Find the Circumference AND the Area:

[$C = \pi d$ or $2\pi r$, $A = \pi r^2$]



Find the Volume: [$V = lwh$]

