Solve the equations below. Justify the odds.

1. $12=-x+1$ 2. $2x-4=6$ 3. $-2\left(x+3\right)=12$

4. $7n+6=4n-9$ 5.  6. 2x – 5(x – 3) = 2(x – 10)

7.  8.  (yes, the answer is a decimal ☺)

Find the slope between the two points.

9. (-4, 5) (6, 2) 10. (7,4) (-6, 4) 11. (-3,7) (9, 1)

Write the equation of a line using the given information.

12. m = 3 b = -5 13. m = -2 crosses point (-8, 6) 14. (2,6) (-4, 5)

15. How do we know when lines are parallel? Perpendicular? (Write answer in complete sentences)

Determine if the lines are parallel, perpendicular or neither. Explain why.

16. y = 3x + 4 17. y = 3x + 4 18. y = 3x + 4

 y = -3x - 4 y = 3x – 4 y = - x – 4

Simplify the radicals. Show all work!

19.  20.  21.  22. 

Find the distance ***and*** midpoint using the 2 points. Hint: distance = 
Simplify the distance, if needed.

23. (5, 3) ( -1, 7) 24. ( -6, 7) (9, -3)

Match the angle name to its measure.

\_\_\_\_\_\_\_ 23. straight A. angles add up to 180 degrees

\_\_\_\_\_\_\_ 24. acute B. exactly 90 degrees

\_\_\_\_\_\_\_ 25. obtuse C. angles add up to 90 degrees

\_\_\_\_\_\_\_ 26. right D. exactly the same angle

\_\_\_\_\_\_\_ 27. complementary E. between 90 and 180 degrees

\_\_\_\_\_\_\_ 28. supplementary F. exactly 180 degrees

\_\_\_\_\_\_\_ 30. vertical G. between 0 and 90 degrees

31. The sum of the angles in any triangle is \_\_\_\_\_\_ degrees.

32. Find x. 33. Find angle A.

xº

B

(2x +6)º

3xº

C

xº

24º

106º

A

Triangle ABC is a right triangle. Find the missing side.

34. 35. 36.

A

B

B

15

8

29

20

12

15

C

C

C

B

A

A

37. Are these sides to a right triangle? 12, 34, 37

Find the perimeter (or circumference for a circle) **and area** of each shape.

38. 39. 40.

5 in

7 mm

10 ft

12 ft

20 ft

13 mm

18 ft