ST. BRENDAN HIGH SCHOOL

Champagnat Geometry Summer Math Packet

Congratulations and welcome to Geometry!

This summer math packet is a review of some of the concepts learned in Algebra 1 and middle school that will be needed for Geometry. It will assure that all students begin the school year on the same page and with equal opportunity to succeed in Geometry.

Instructions for completing the packet:

- Please print the packet or use loose leaf paper to complete the packet by hand showing all work. Work must be neat and legible.
- Please use your Algebra 1 notes or the websites provided to help you if you need reminders on how to complete some practice problems.
- Take notes as you complete your work. You will be given a quiz on this material the first week of school.
- Work on the packet with your friends. Help each other. Every student is responsible for knowing the material in this packet when you return in August. We will review as a team and everyone will be expected to participate.
- Bring your packet to our first class together. It will be collected for a grade. Only packets done with paper and pencil will be accepted.

Helpful Websites:

http://www.mathtv.com/
http://www.purplemath.com/modules/index.htm
https://www.khanacademy.org

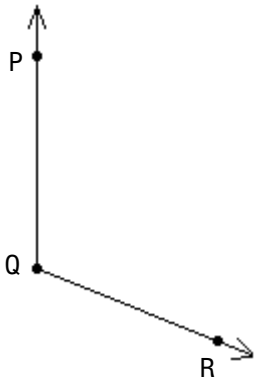
Helpful for graphing functions:
https://www.education.ti.com/en/resources/family-of-functions

Geometry Summer Math Packet

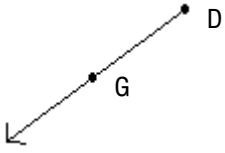
Name_____

Identify the figure as a line, a ray, a line segment, or an angle. Then name the figure using the given points.

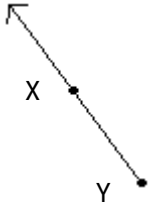
1) 1) _____

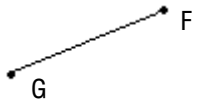


2) 2) _____

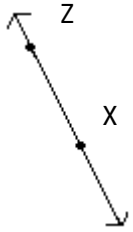


3) 3) _____

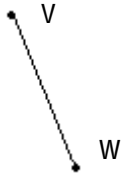


4) 

4) _____

5) 

5) _____

6) 

6) _____

Fill in the blank.

7) _____ angle has a measure of 180°.

7) _____

8) _____ angle measures between 0° and 90°.

8) _____

9) The measure of an acute angle is _____.

9) _____

10) _____ angle has a measure of 90°. 10) _____

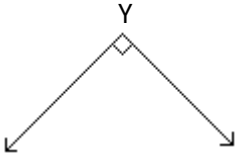
11) _____ angle measures between 90° and 180°. 11) _____

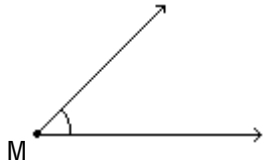
12) The measure of a right angle is _____. 12) _____

Classify the angle as acute, right, obtuse, or straight.

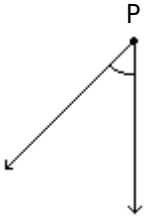
13) 13) _____

14) 14) _____

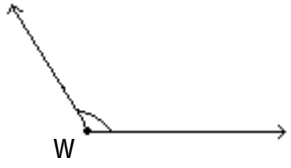


15) 

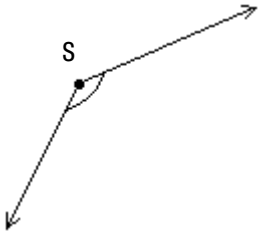
15) _____

16) 

16) _____

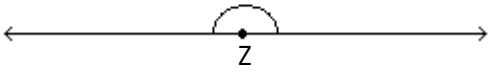
17) 

17) _____

18) 

18) _____

19) 19) _____



Simplify the expression.

20) $-5 + 7$ 20) _____

21) $8 - 27$ 21) _____

22) $0.5(-2 \cdot 11)$ 22) _____

23) $-56 \div (-7)$ 23) _____

Write the fraction in lowest terms.

24) $\frac{15}{40}$ 24) _____

25) $\frac{30}{70}$ 25) _____

Multiply or divide as indicated. Write the answer in lowest terms.

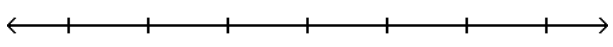
26) $\frac{5}{8} \cdot \frac{3}{4}$ 26) _____

27) $\frac{15}{7} \cdot \frac{1}{5}$ 27) _____

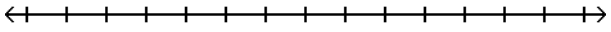
28) $\frac{2}{8} \div \frac{3}{7}$ 28) _____

Solve the inequality. Graph the solution set.

29) $5x + 2 > 4x + 12$ 29) _____



30) $\frac{7}{8}x \geq 5$ 30) _____



Evaluate the expression when x = 2, y = 1, and z = 4.

31) $\frac{y}{9x}$ 31) _____

32) $7x + 8$ 32) _____

33) $|4z - 5y|$ 33) _____

Simplify the expression.

34) $9^2 - 2 \cdot 5$ 34) _____

35) $9 \cdot 8 - 5$ 35) _____

Summer Math Packet

Date_____ Period____

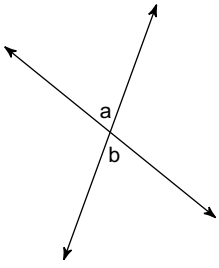
Classify each angle as acute, obtuse, right, or straight.

36) 180°

37) 90°

Name the relationship: complementary, linear pair, vertical, or adjacent.

38)



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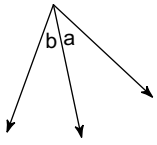

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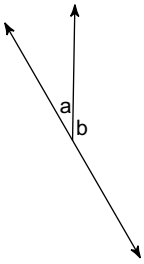

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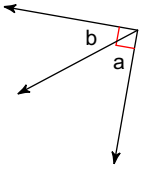
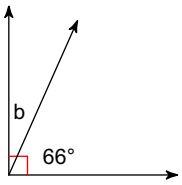


Find the measure of angle b.

42)



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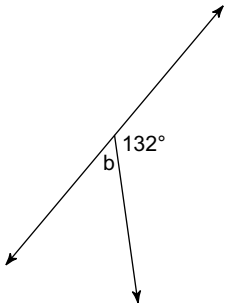
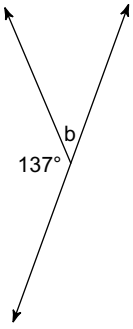


44)



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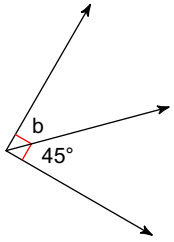
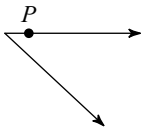


State if the given point is interior, exterior, or on the angle.

46)



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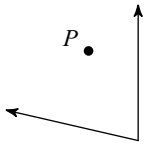
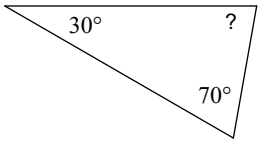
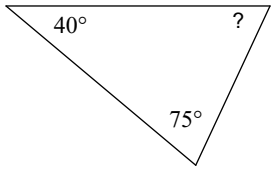
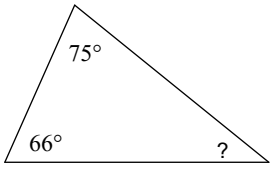
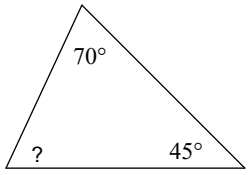


Find the measure of each angle indicated. (Sum of the 3 angles=180)

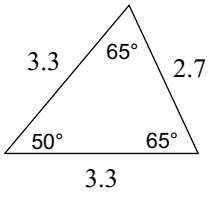
48) 

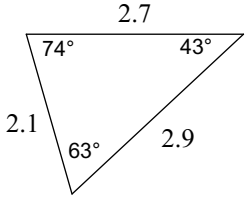
49) 

50) 

51) 

Classify each triangle by its sides.(isosceles, equilateral, scalene)

52) 

53) 

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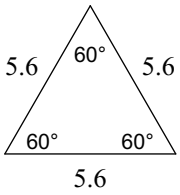


Solve each equation.

55) $x - 2x = 0$

56) $n - 5 - 3 = -2$

57) $-3r + 2 + r = -4$

58) $b - 5 + 2 = -2$

59) $5 - x - 2x = -10$

60) $12 = -6x - 6x$

61) $-v - 4v = 15$

62) $-9 = 1 - 4a - 6a$

63) $-3k - k = 12$

64) $12 = -p + 5p$

65) $1 + 4n = 5 + 5n$

66) $9 - 6r = 3 - 5r$

67) $-6 - m = m + 2$

68) $4x + 8 = 2 + 4x + 6x$

69) $5 + 6b - 4b = -6b + 3b$

70) $-10 + 6x = 2 + 4x$

71) $-6v - 2 = -2v - 3v$

72) $-7 - 4x = 1 - 2x$

73) $3 + 4n = 5 + 2n$

74) $12 - 6n = -6n - 4n$

Solve each proportion.

75) $\frac{a}{2} = \frac{9}{7}$

76) $\frac{6}{2} = \frac{2}{x}$

77) $\frac{5}{x} = \frac{6}{7}$

78) $\frac{7}{k} = \frac{10}{6}$

79) $\frac{n}{10} = \frac{2}{8}$

80) $\frac{m}{8} = \frac{6}{7}$

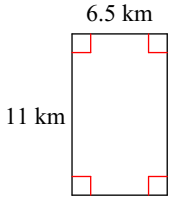
81) $\frac{7}{2} = \frac{2}{p}$

82) $\frac{x}{4} = \frac{8}{10}$

83) $\frac{2}{4} = \frac{10}{n}$

Find the area of each.

84)



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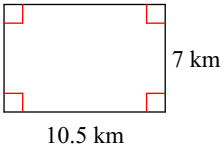

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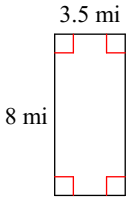

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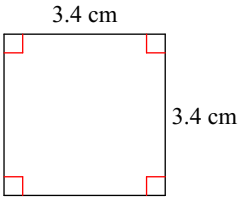

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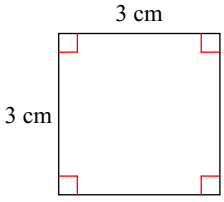

Simplify.

89) $\sqrt{64}$

90) $\sqrt{8}$