

Name: _____

Geometry / Honors Geometry

Summer Review Packet

DUE: FIRST WEEK OF SCHOOL

Formulas you might need:

Slope given 2 points
(x_1, y_1) and (x_2, y_2)

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Area formulas:

Rectangle $A = bh$

Triangle $A = \frac{1}{2}bh$

Circle $A = \pi r^2$

Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Circumference

$$C = 2\pi r \quad \text{or} \quad C = \pi d$$

Algebra Skills you need for Geometry...

Directions: Show work of each problem.

Part 1

Simplify. Make sure to reduce all fractions!!

1. $4(3+2)$

2. $4+2(3-6)$

3. $(2 - 4)^2$

4. $\frac{2+4}{3+5}$

5. $\frac{2}{3}(4 + 2)$

6. $1.2(4.6 - 11.4)$

Part 2

Solve for x.

7. $5x + 3 = -12$

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

9. $7x - 8x + 4 = 5x - 2$

10. $3(x - 2) = 18$

$$11. (3x + 2) - 2(x-4) = 7$$

$$12. \frac{x}{3} = \frac{4}{9}$$

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

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

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

$$16. \frac{x+5}{x-7} = \frac{x-2}{x+2}$$

Part 3

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

$$17. x^2 + 3x = 0$$

$$18. x^2 - 5x - 24 = 0$$

$$19. 3x^2 + x - 4 = 0$$

Part 4

Determine the slope of the line through each pair of points:

20. (5, 1) and (2, 7)

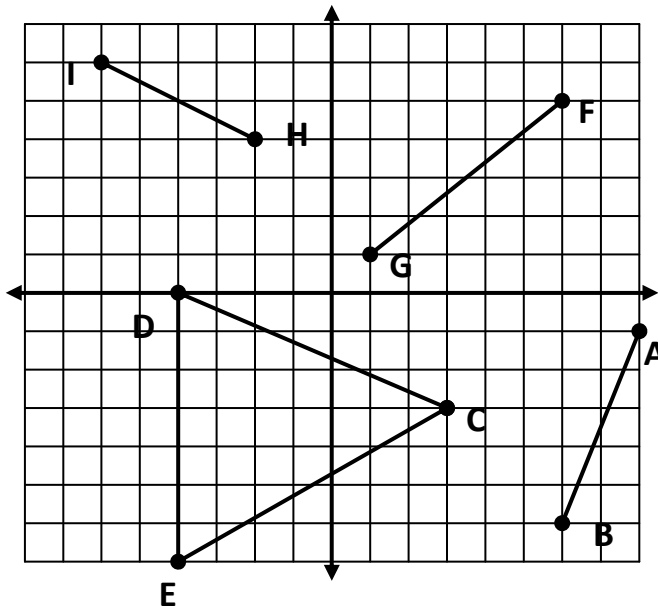
21. (5, -4) and (-3, 6)

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

23. (1.3, -4.2) and (-2.5, 0.6)

Part 5

Use the graph to answer 24 and 25.



24. Determine the coordinates.

A _____

C _____

D _____

F _____

I _____

25. Determine the slope of the line segments

AB= _____

DE= _____

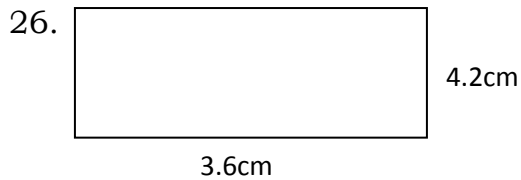
FG= _____

HI= _____

Basic Geometry you already know!!!

Part 6

Determine the area and perimeter of each figure:



Area=

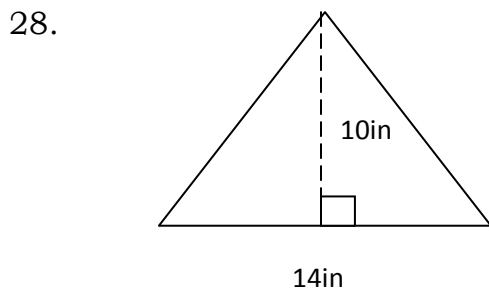
Perimeter=

27. A square with sides of 9mm

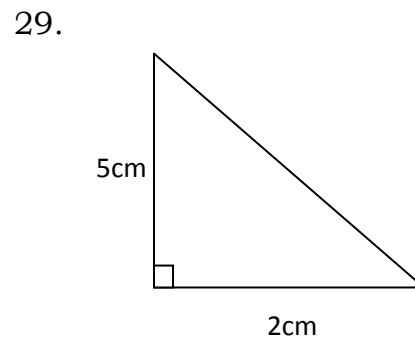
Area=

Perimeter=

Determine the area of each figure:

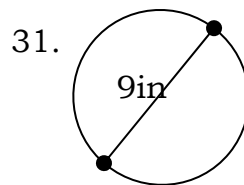
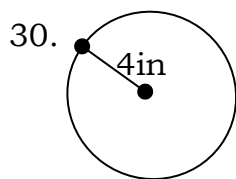


Area=



Area=

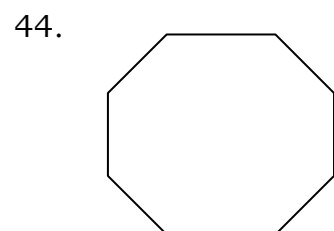
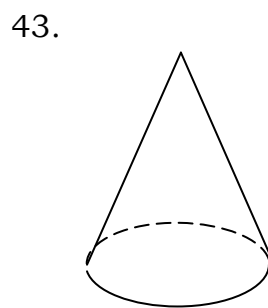
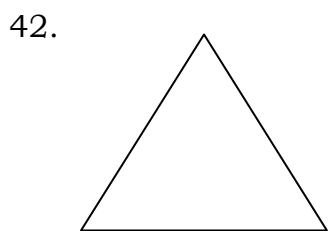
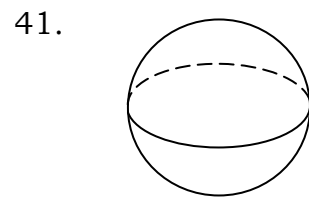
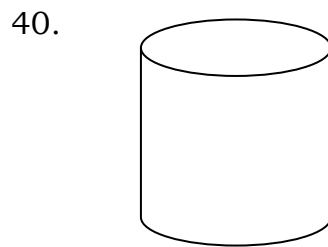
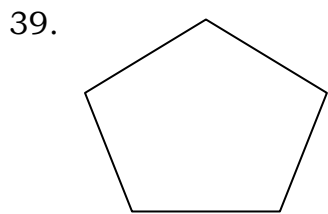
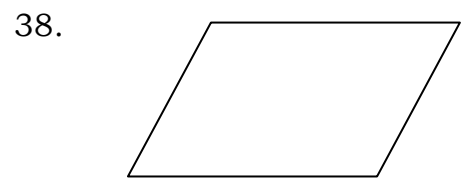
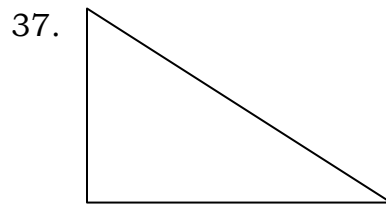
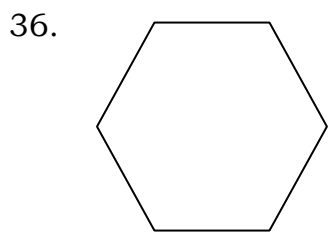
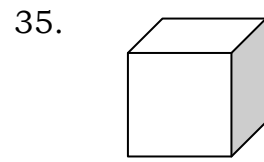
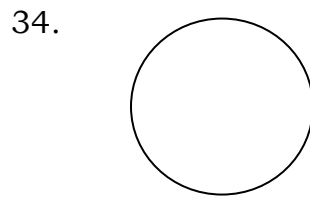
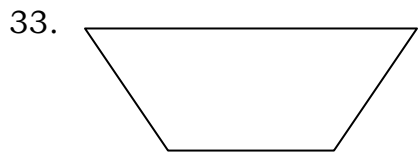
Determine the area and circumference for 30 and 31.



32. Determine the circumference if the area of a circle is 36π square centimeters.

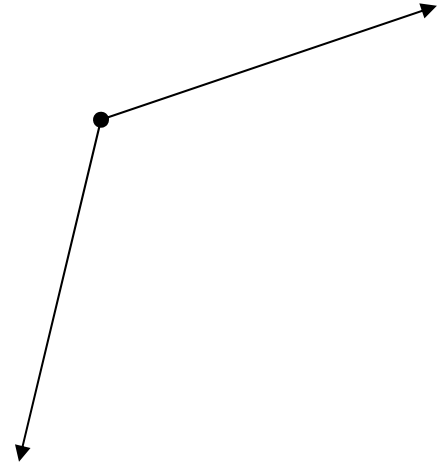
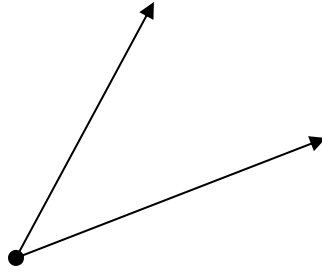
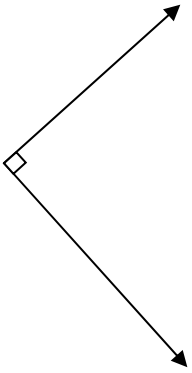
Part 7

Identify each figure by name

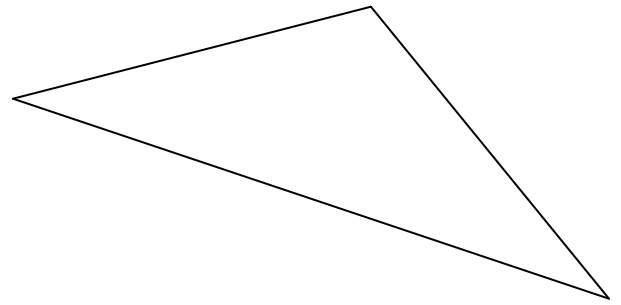
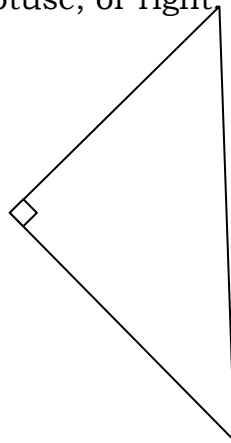
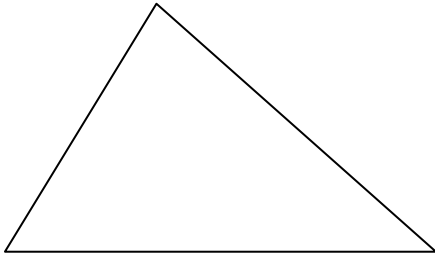


Part 8

45. Identify the angle as acute, obtuse, or right.



46. Identify the triangle as acute, obtuse, or right.



Part 9

47. Label the parts of the figure.

