

Unit 9 Check Sheet

Name _____ Per _____

Connecting Algebra & Geometry

(Print)

- Check sheet must be turned in to receive Homework & Quiz points.
- All quiz corrections must be done for test score to replace quiz scores.
- No check sheet = No Points.
- Write quiz scores as fractions
- Lost Quizzes count as a 0.
- Quiz ratio is total points scored on quizzes and pre-test out of total possible
- Order (from top to bottom)
 - Check sheet,
 - **Quiz 1, 2, Pre-Test**
 - **Quiz corrections**

Section	HMK
9.1 Perimeter and Area in the Coordinate Plane Worksheet 9.1 #1-22 all	
9.2 Areas of Parallelograms and Triangles Worksheet 9.2 #1-17 all Quiz 1	
9.3 Areas of Trapezoids, Rhombuses, and Kites Worksheet 9.3 #1-22 all	
9.4 Polygons in the Coordinate Plane Worksheet 9.4 #1-13 all Quiz 2	
Review Practice Test WS 1 #1-15 all Pre-Assessment	
Unit Test	

Quiz 1: _____ Score/Possible

Quiz 2: _____ Score/Possible

Pre-Test: _____ Score/Possible

Total Quiz Ratio: _____ Total Score/Total Possible

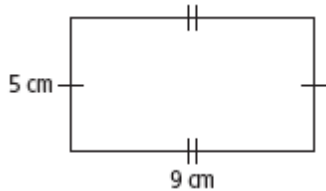
9.1 Practice

Form G

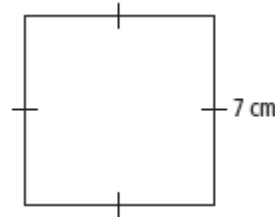
Perimeter and Area in the Coordinate Plane

Find the perimeter of each figure.

1.



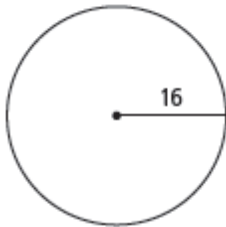
2.



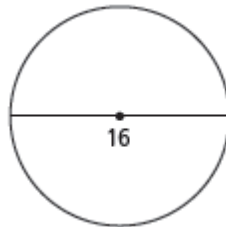
3. An 8-ft-by-10-ft rug leaves 1 ft of the bedroom floor exposed on all four sides. Find the perimeter of the bedroom floor.

Find the circumference of each circle in terms of π .

4.



5.

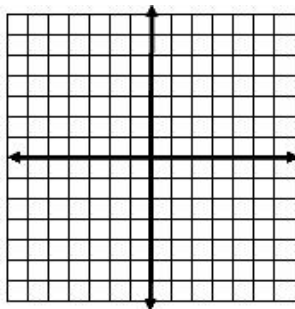


6.

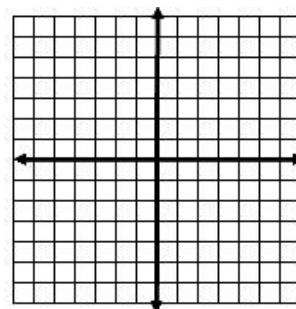


Graph each figure in the coordinate plane. Find its perimeter and area.

7. $W(-4, 6)$, $X(-4, 2)$, $Y(2, 6)$, $Z(2, 2)$



8. $R(1, 2)$, $S(1, -2)$, $T(4, -2)$, $V(4, 2)$



Find the area of the rectangle with the given base and height.

9. 4 ft, 15 ft.

10. 100 yd, 3 yd

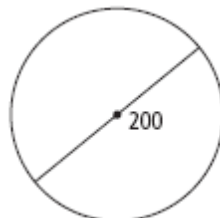
11. 3 m, 10 m

Find the area of each circle in terms of π .

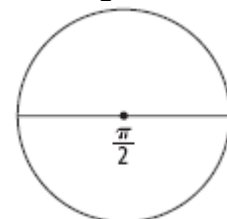
12.



13.



14. Challenge:

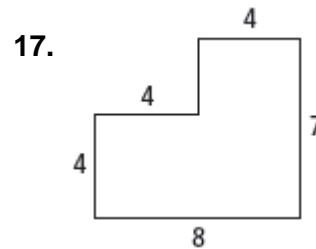
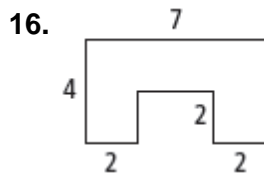
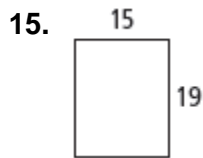


Practice (continued)

Form G

Perimeter and Area in the Coordinate Plane

Find the area of each shaded region. All angles are right angles.



Find the circumference and area of each circle, using $\pi = 3.14$. If necessary, round to the nearest tenth.

18. $r = 5$ m

19. $d = 2.1$ in.

20. The area of a circle is 25π in.². What is its radius?

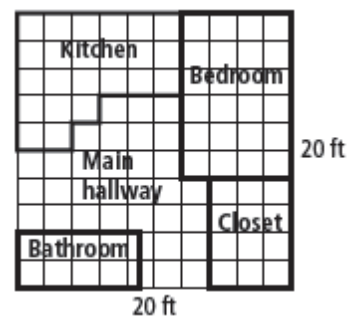
21. A rectangle has twice the area of a square. The rectangle is 18 in. by 4 in. What is the perimeter of the square?

22. The units of the floor plan at the right are in feet. You are remodeling some of the floors with hard-wood flooring and you will need to know the perimeter for the baseboards and the area for the flooring.

How much flooring (area) would you need to do the kitchen?

How much baseboard (perimeter) would you need to Redo the Kitchen?

How much flooring would you need for the main hallway?

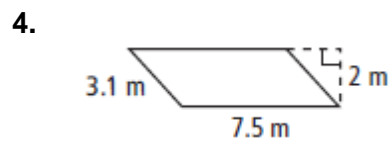
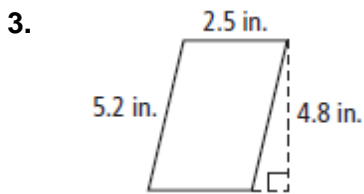
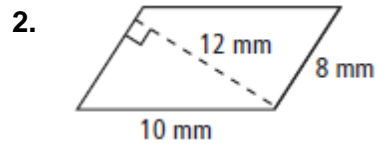
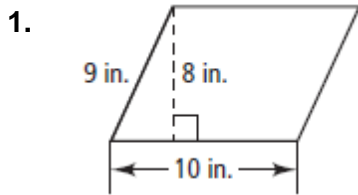


9.2 Practice

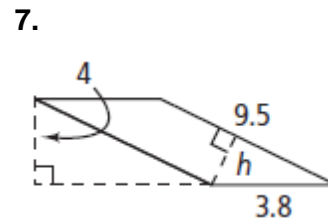
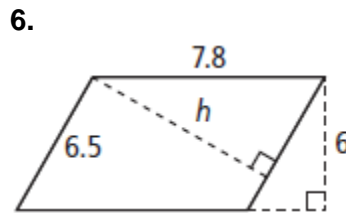
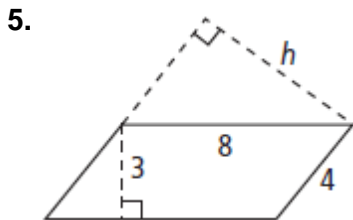
Form G

Areas of Parallelograms and Triangles

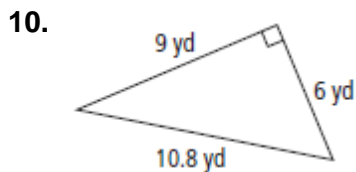
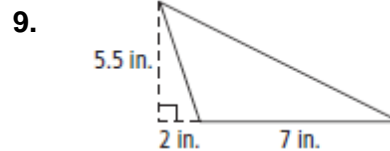
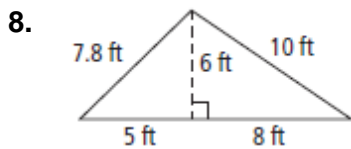
Find the area of each parallelogram.



Find the value of h for each parallelogram.



Find the area of each triangle.

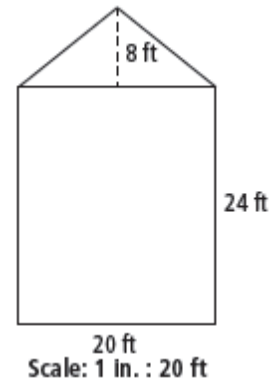


Practice (continued)

Form G

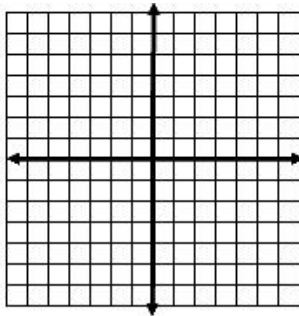
Areas of Parallelograms and Triangles

12. A scale drawing of the side view of a house is shown at the right. Find the total area (in square inches) of the side of the house in the drawing.

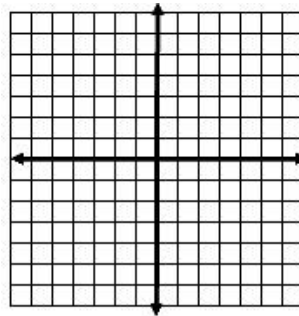


Coordinate Geometry Find the area of a polygon with the given vertices.

13. $A(2, 2), B(5, 2), C(3, -1), D(0, -1)$

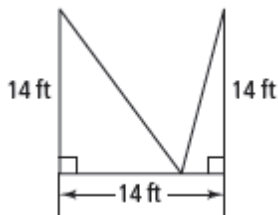


14. $A(5, -3), B(-1, -3), C(-1, 2), D(5, 6)$

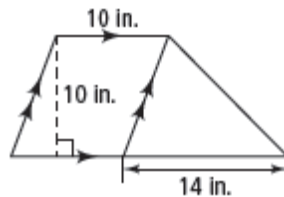


Find the area of each figure.

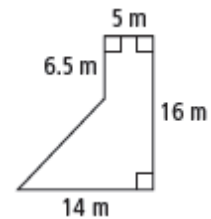
- 15.



- 16.



- 17.

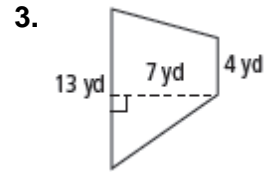
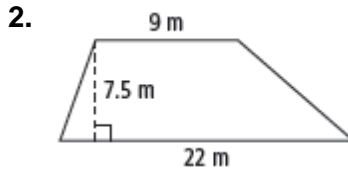
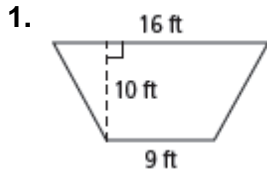


9.3 Practice

Form G

Areas of Trapezoids, Rhombuses, and Kites

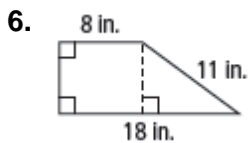
Find the area of each trapezoid.



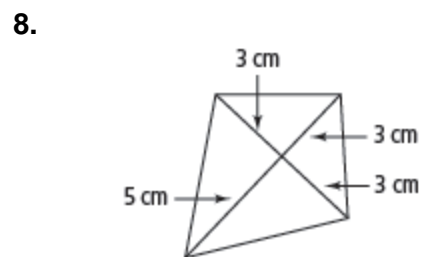
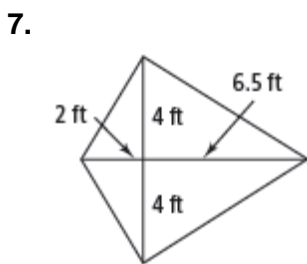
4. Find the area of a trapezoid with bases 20 cm and 14 cm and height 5 cm.

5. Find the area of a trapezoid with bases 8 in. and 7 in. and height 5.2 in.

Find the area of the trapezoid. Round answers to the nearest tenth.



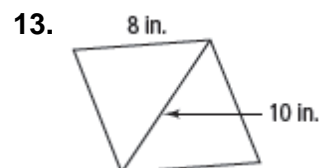
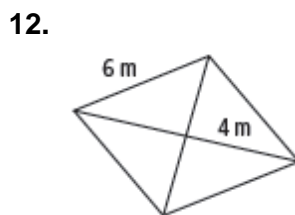
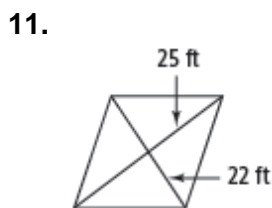
Find the area of each kite.



9. Find the area of a kite with diagonals 12 ft and 3 ft.

10. Find the area of a kite with diagonals 16 m and 14 m.

Find the area of each rhombus.



14. Find the area of a rhombus with diagonals 9 yd and 6 yd.

15. Find the area of a rhombus with diagonals 4.5 in. and 5.2 in.

Practice (continued)

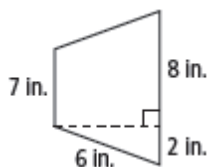
Form G

Areas of Trapezoids, Rhombuses, and Kites

16. A trapezoid has two right angles, 16 in. and 20 in. bases, and 5 in. height. Sketch the trapezoid and find its perimeter and area.

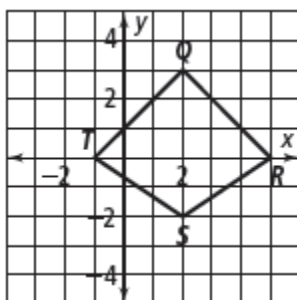
Find the area of each trapezoid to the nearest tenth.

17.

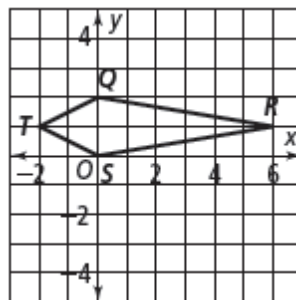


Coordinate Geometry Find the area of quadrilateral $QRST$.

18.



19.

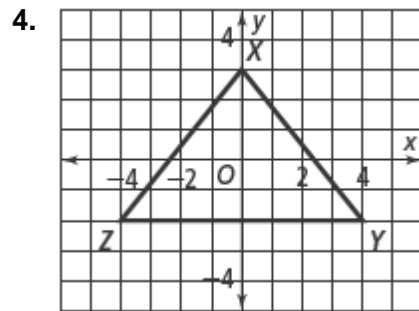
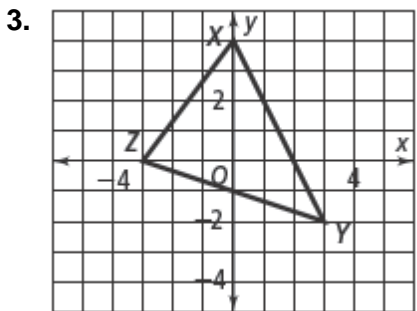
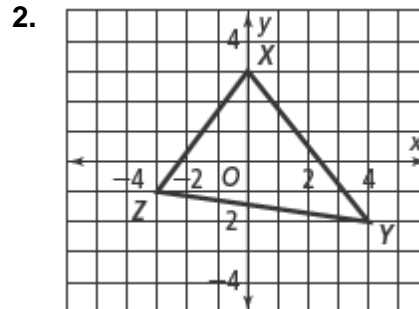
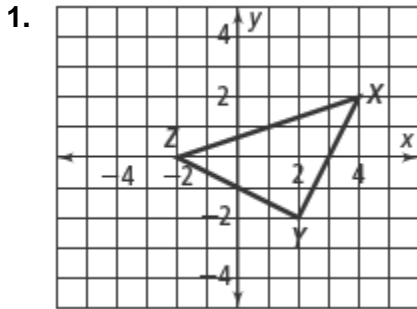


9.4 Practice

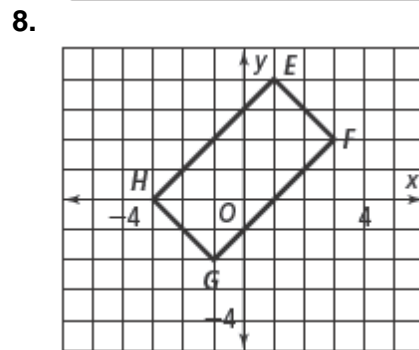
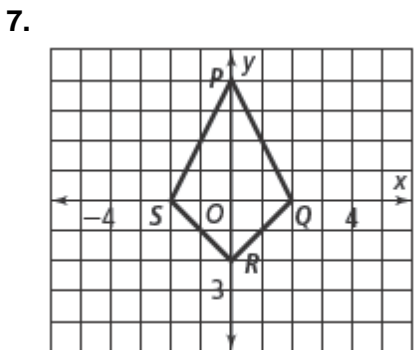
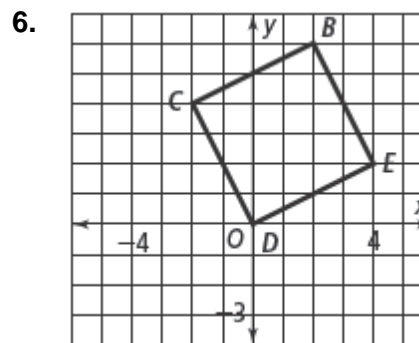
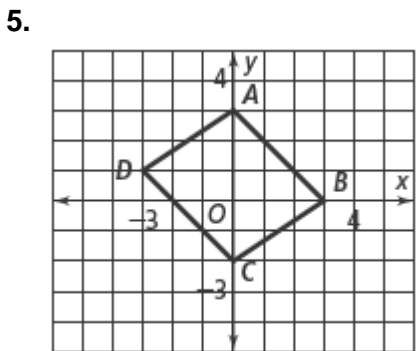
Form G

Polygons in the Coordinate Plane

Determine whether $\triangle XYZ$ is *scalene*, *isosceles*, or *equilateral*.



What is the most precise classification of the quadrilateral below?

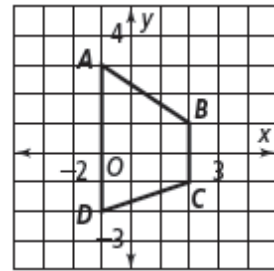


Practice (continued)

Form G

Polygons in the Coordinate Plane

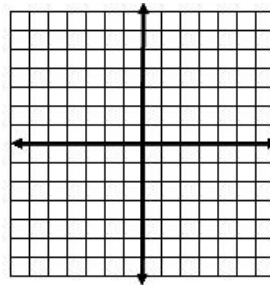
Use the trapezoid at the right for Exercise 9.



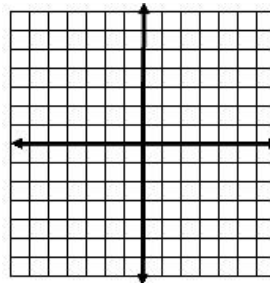
9. Is the trapezoid an isosceles trapezoid? Explain.

Determine the most precise name for each quadrilateral. Then find its area.

10. $A(-6, 3), B(-2, 0), C(-2, -5), D(-6, -2)$

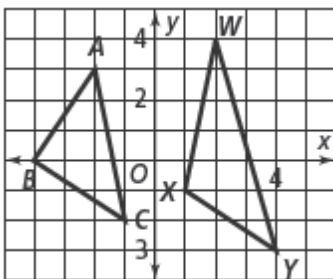


11. $A(0, -1), B(1, 4), C(4, 3), D(3, -2)$

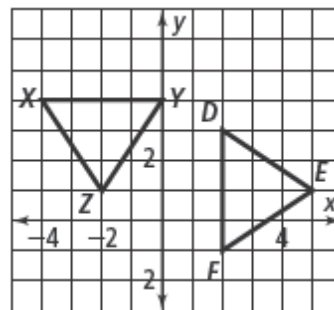


Determine whether the triangles are congruent. Explain.

12.



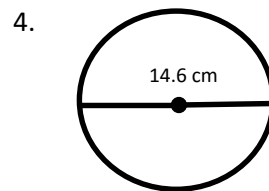
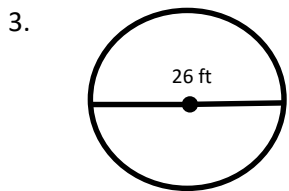
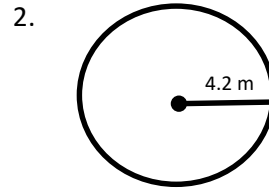
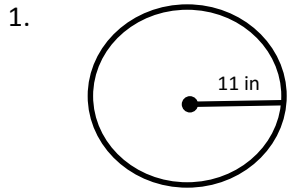
13.



Name _____ Period _____ Date _____

Math 1 Unit 9 Review

Find the areas **AND** circumferences of the circles for 1-4. Give answers in terms of π **AND** to the nearest tenth.

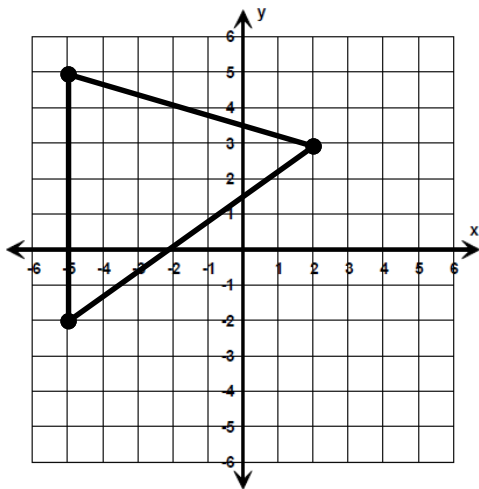


5. The area of a circle is $100\pi \text{ cm}^2$. Find the circumference to the nearest tenth.

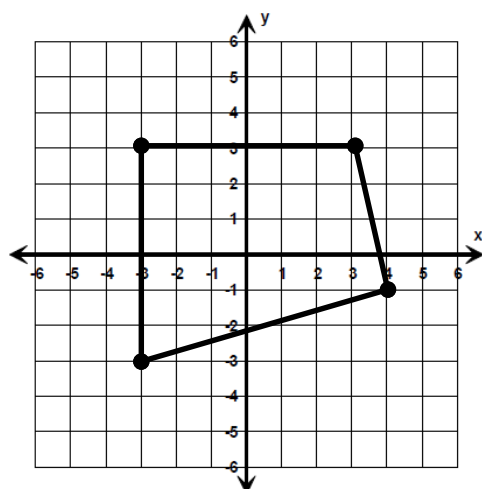
6. The circumference of a circle is $50\pi \text{ ft}$. Find the area in terms of π .

7. The area of a square is 1.96 cm^2 . Find the length of the side.

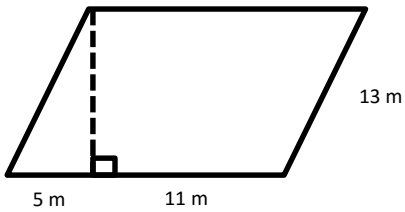
8. Find the area of the triangle



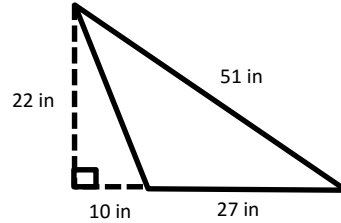
9. Find the area of the quadrilateral



10. Find the area of the parallelogram

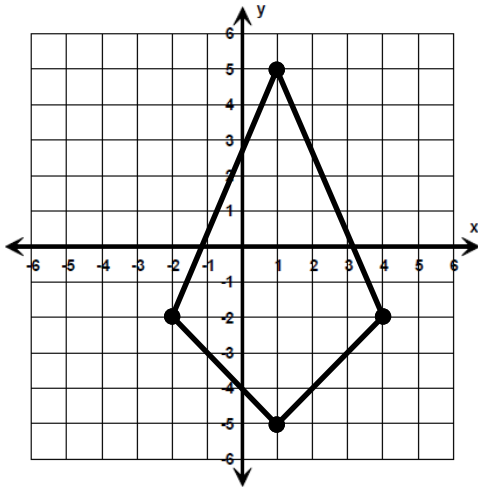


11. Find the area of the triangle

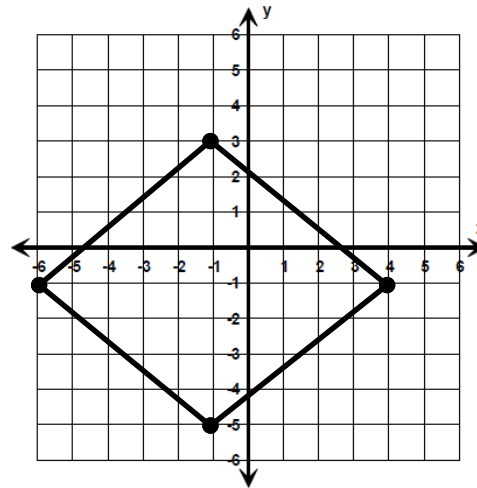


12. A trapezoid has base measurements of 8 cm and 13cm. If the height is 12 cm, what is its area?

13. Find the area of the kite

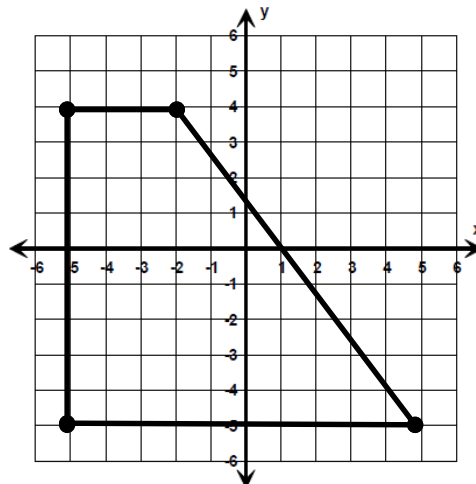


14. Find the area of the rhombus

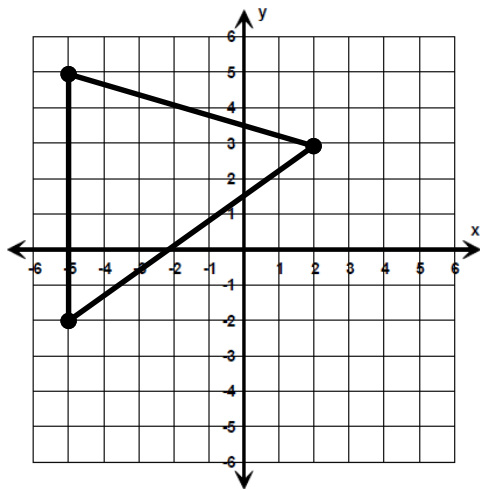


15. A rectangle has a perimeter of 42 yds. If the base of the rectangle is 8 yds, what is the area?

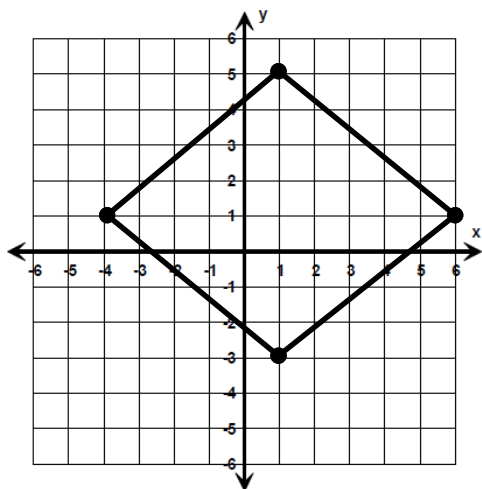
16. Find the perimeter and the area of the trapezoid (round to the nearest tenth)



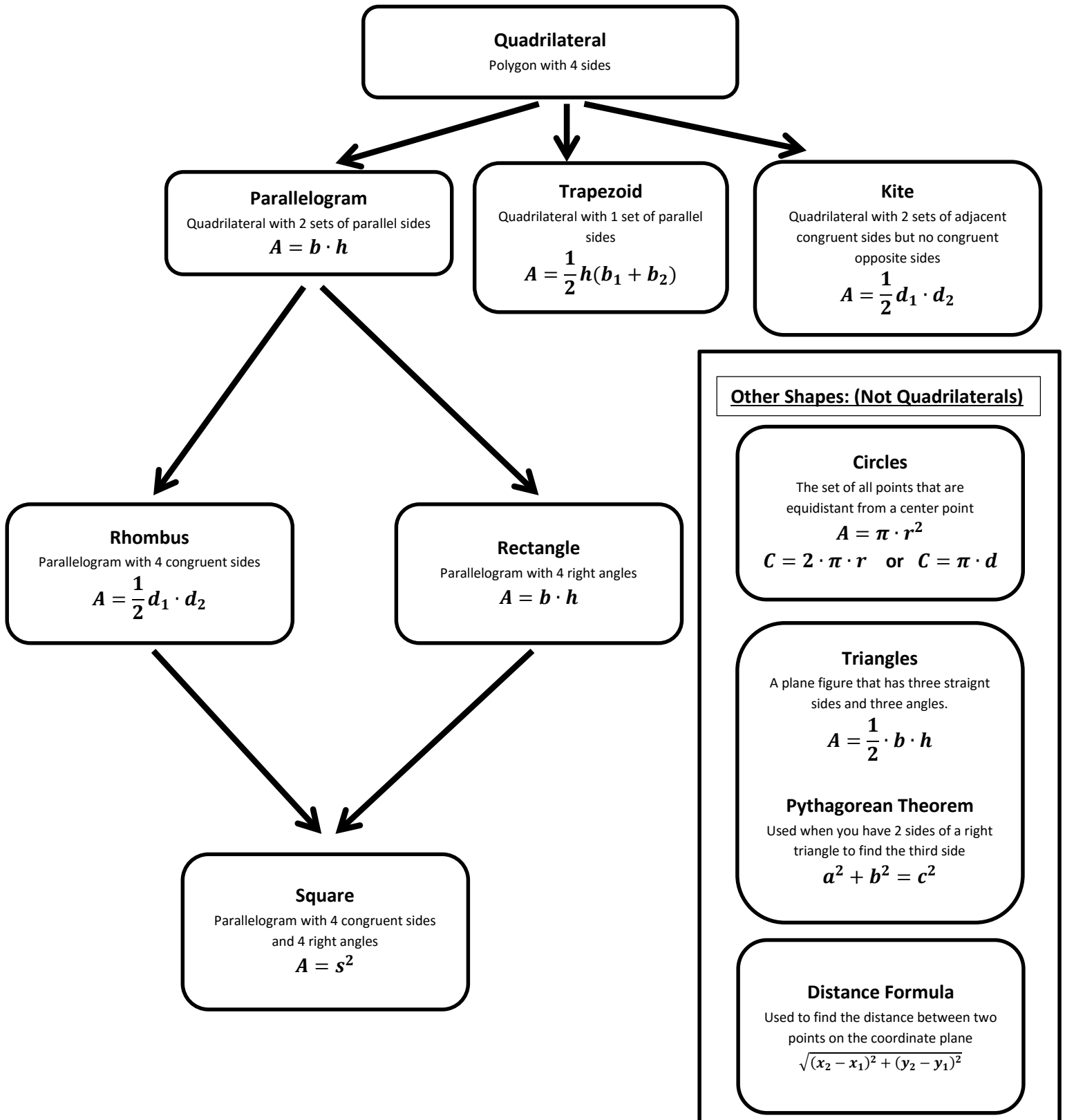
17. Identify the triangle as Scalene, Isosceles, or Equilateral. Show work and explain your reasoning



18. Give the best name for the quadrilateral.



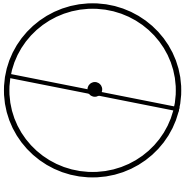
Math 1 Unit 9: Quadrilateral Flowchart & Formulas



Math 1 Unit 9 Practice Test

Name _____

1. The diameter of $\odot Z$ is 10 in.



What is its area in terms of π ?

A = _____

What is its circumference in terms of π ?

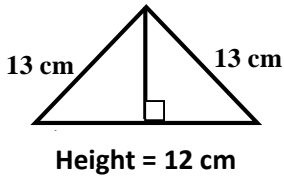
C = _____

Find the area of the following shapes. Write the formula and then find the area.

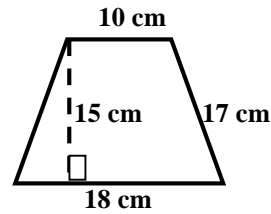
2. The perimeter of a square is 64 meters. Find the area of the square.

2. _____

3.



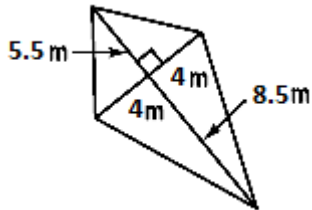
4.



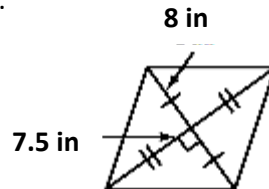
3. _____

4. _____

5.



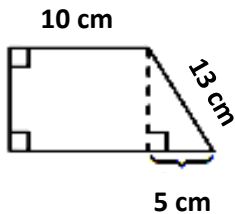
6.



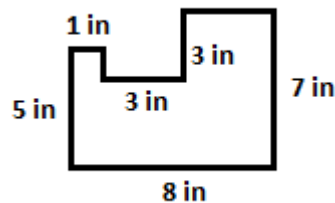
5. _____

6. _____

7.



8.

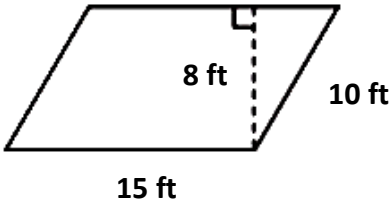


7. _____

8. _____

9. A classmate calculated the area of the parallelogram as 80 ft^2 . Explain your classmate's error. What is the correct area?

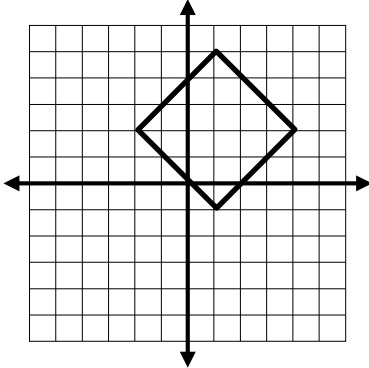
9. _____



10. Find the area of the polygon.

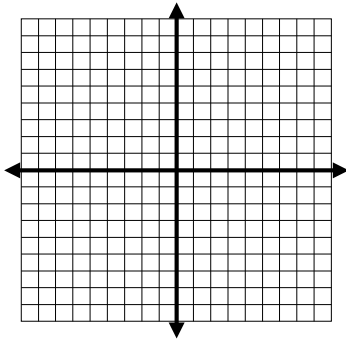
Explain how you found your answer.

10. _____



11. Graph and label $\triangle ABC$ with the given vertices. Calculate the perimeter and the area of $\triangle ABC$.

A (2, 7), B (2, -5), C (-3, -5)



AB = _____

BC = _____

AC = _____

Perimeter:

P = _____

Area:

A = _____

12. A quadrilateral has the given vertices. Determine the most precise name for the quadrilateral, supporting your answer with appropriate calculations and reasoning. Find the area of $ABCD$.

A (4, 2), B (0, -1), C (-5, -1), D (-1, 2)

Slope

Distance

\overline{AB} _____

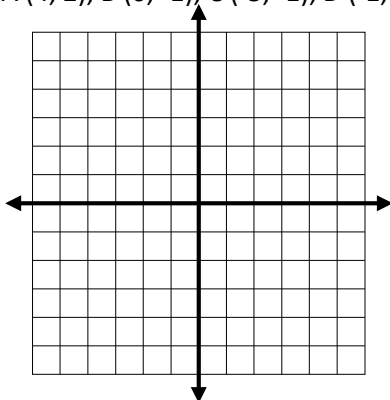
\overline{BC} _____

\overline{CD} _____

\overline{AD} _____

Name _____

A = _____



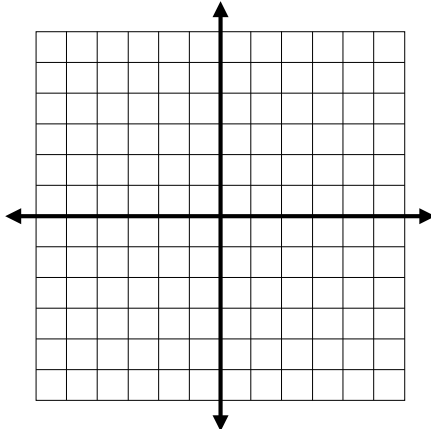
Explain _____

13. What is the most precise classification of the quadrilateral with the given vertices?

13. _____

Prove it by graphing and filling out the chart below.

R (1, 3), S(4, 0), T(1, -3), V(-2, 0)

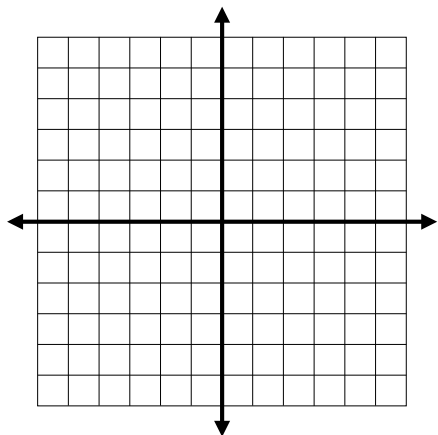


	Slope	Distance
\overline{RS}	_____	_____
\overline{ST}	_____	_____
\overline{TV}	_____	_____
\overline{VR}	_____	_____

Explain _____

14. $\triangle ABC$ has vertices A (-1, -5), B (-1, 3), C (2, -1). Graph and label the points.

Determine if the triangle is equilateral, isosceles or scalene. Include calculations and reasoning to support your answer.

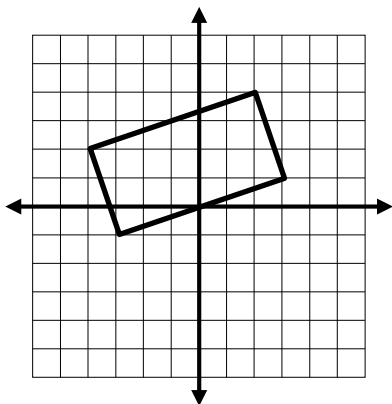


AB = _____ 14. _____

BC = _____

AC = _____

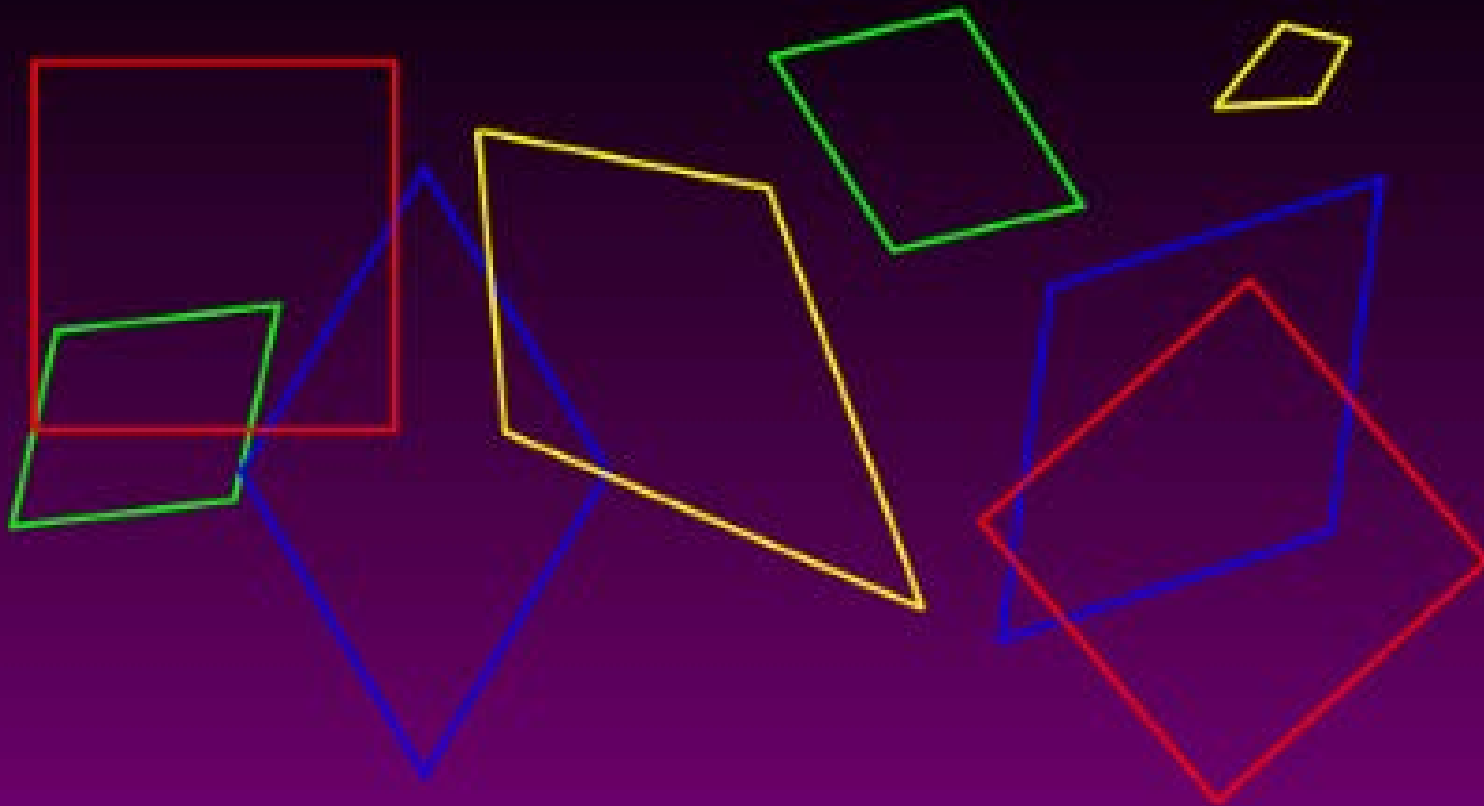
15. Prove that the shape is a rectangle by using the distance and slope formulas.



Show opposite sides are congruent.

Use the slopes of consecutive sides to show that there are four right angles.

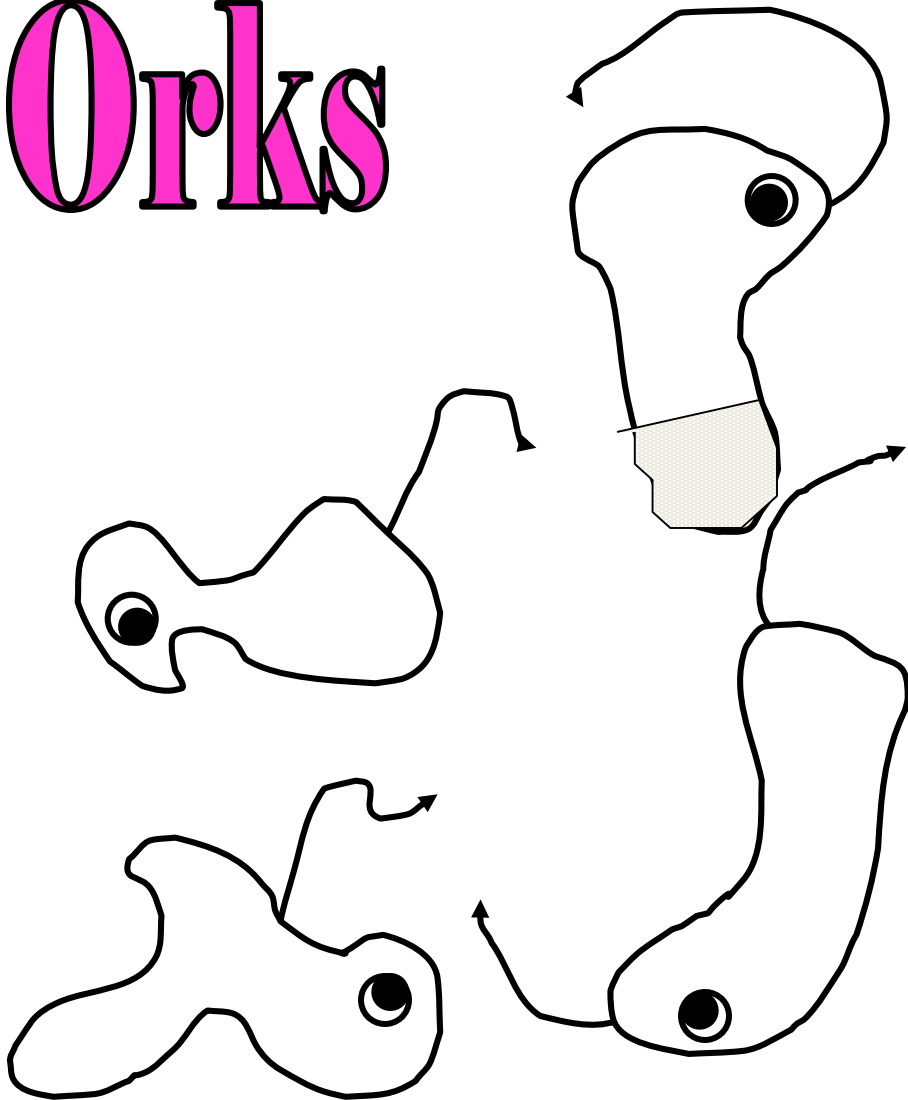
Special Quadrilaterals:



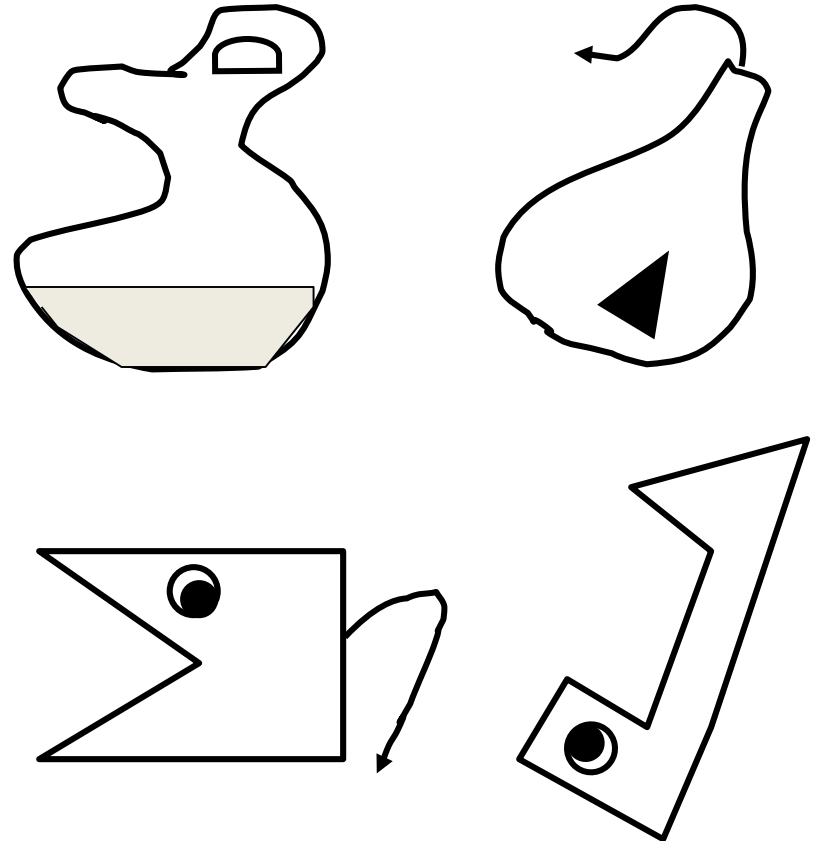
Classifying and Recognizing Characteristics

List the characteristics of an Ork.

Orks

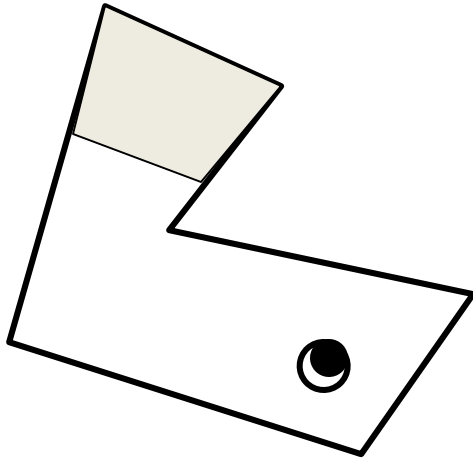


NOT Orks

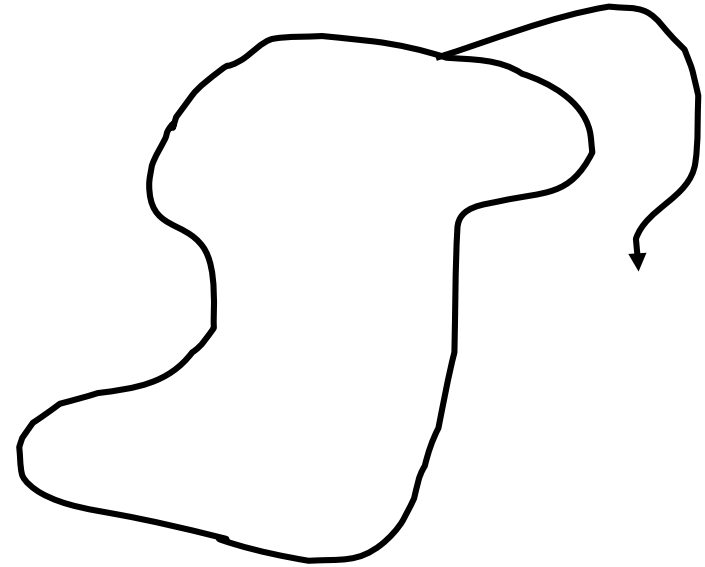


Who are Orks?

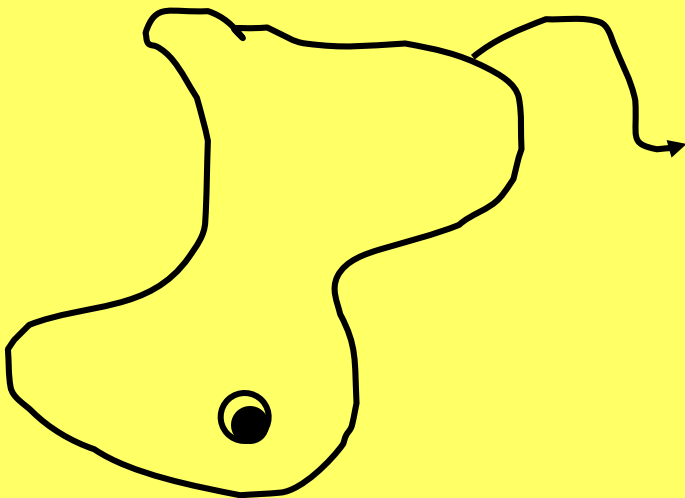
A



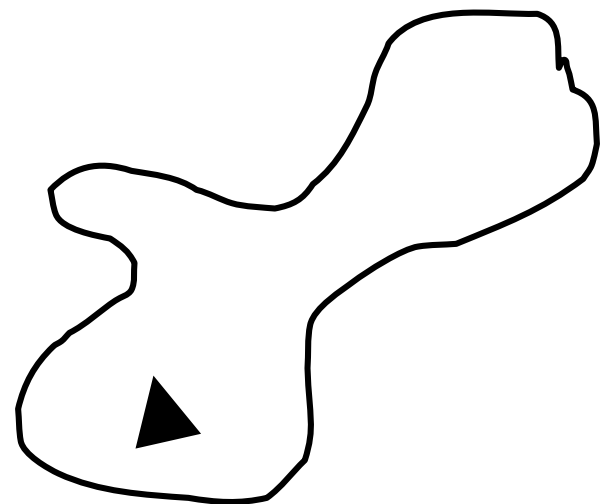
B



C

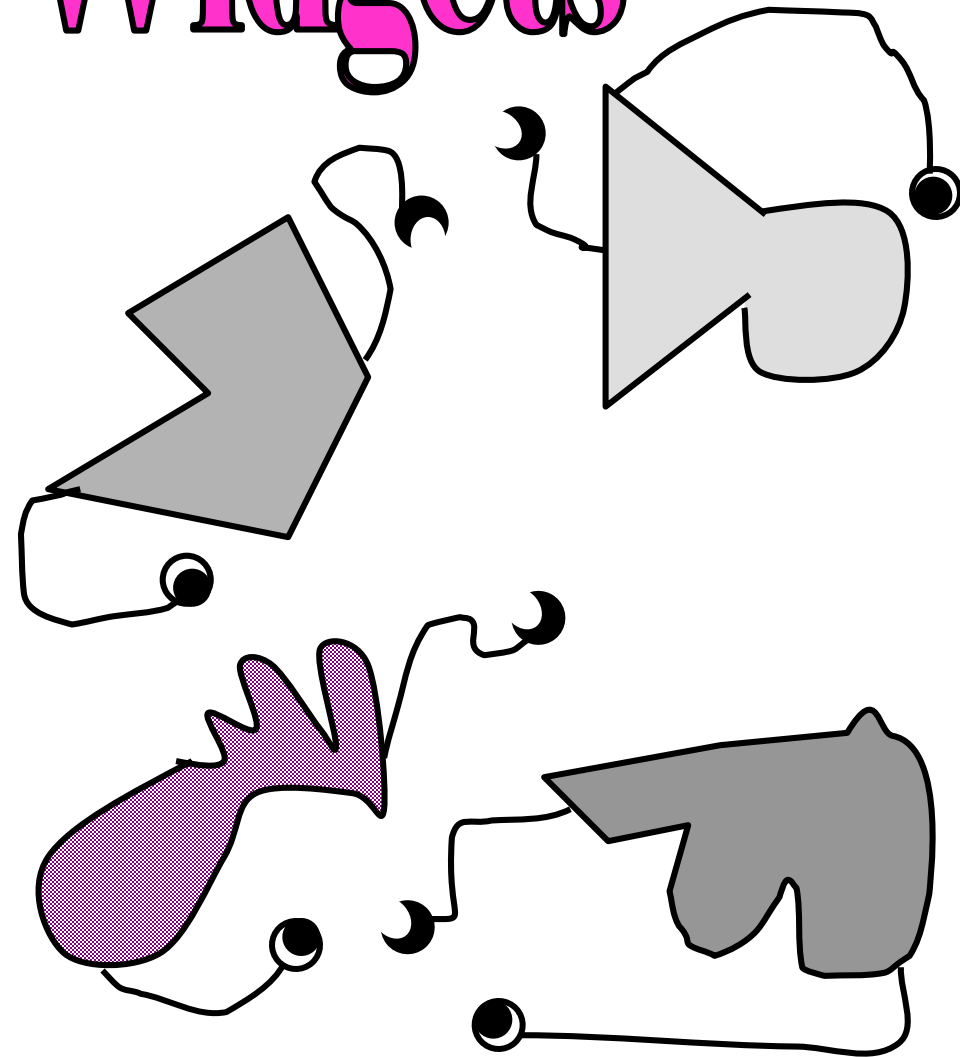


D

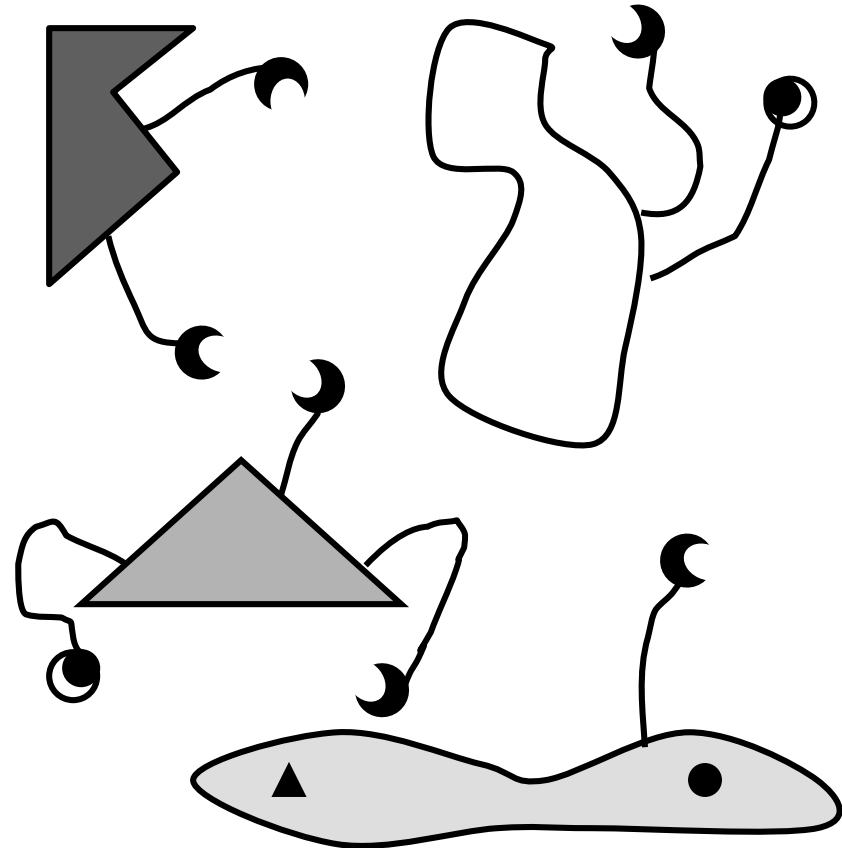


Classifying and Recognizing Characteristics

Widgets

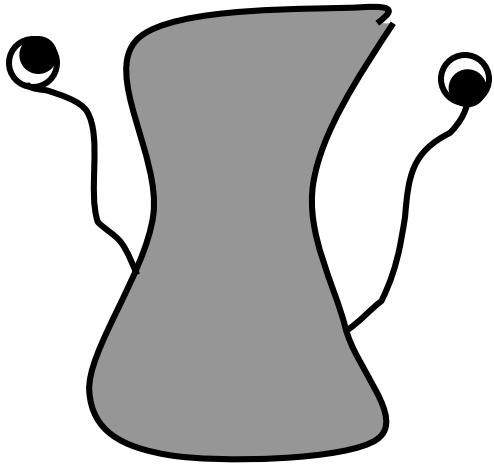


NOT Widgets

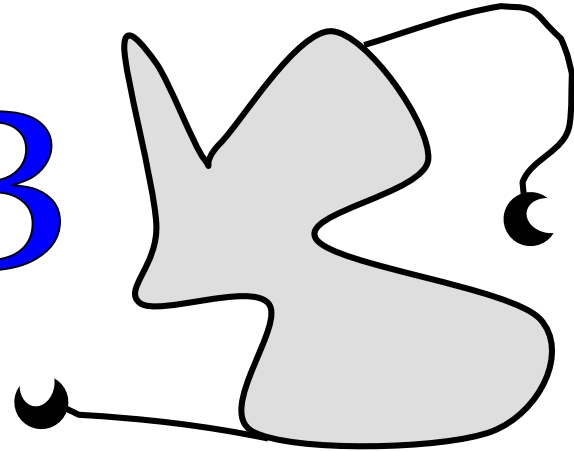


Who are Widgets?

A



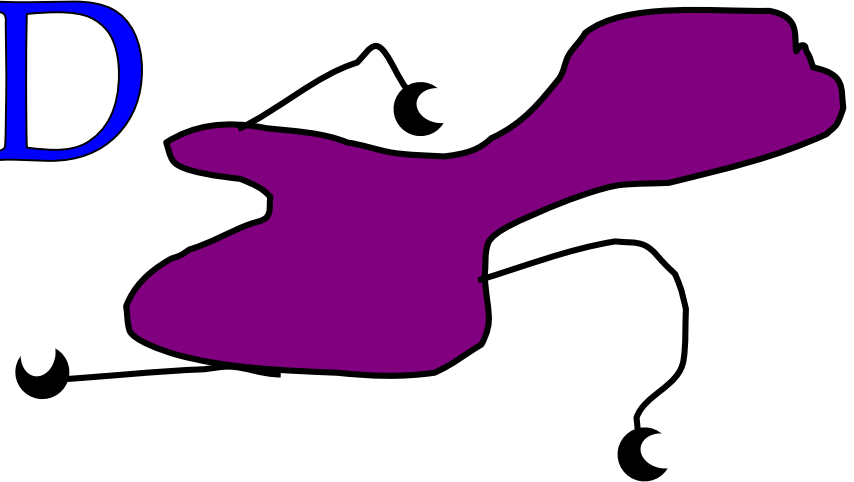
B



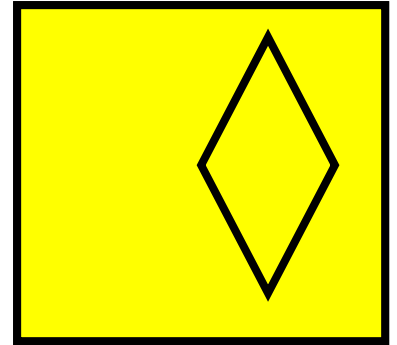
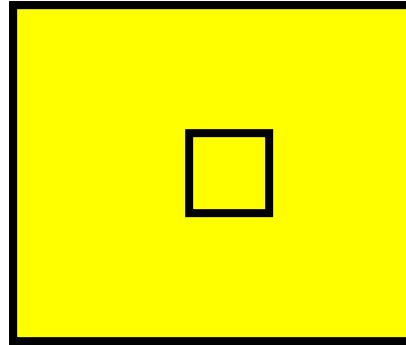
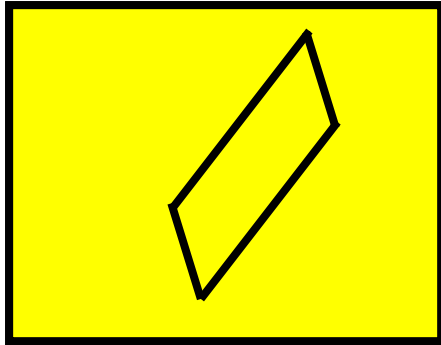
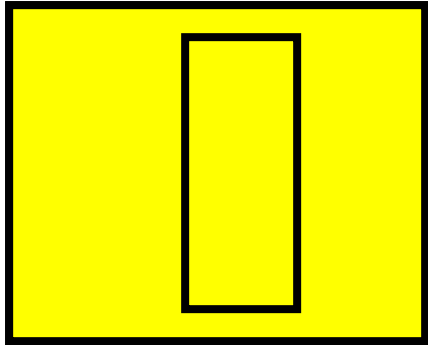
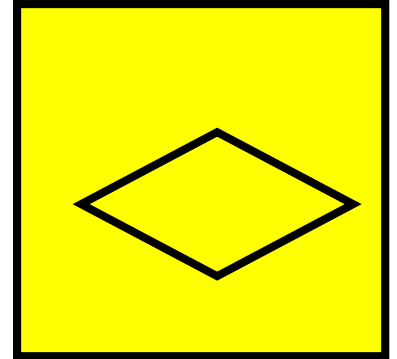
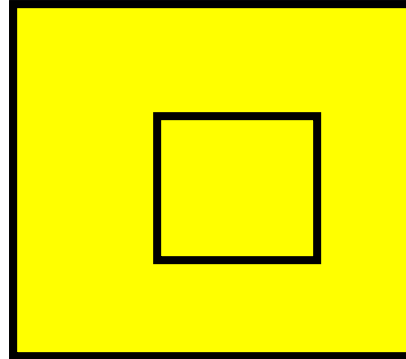
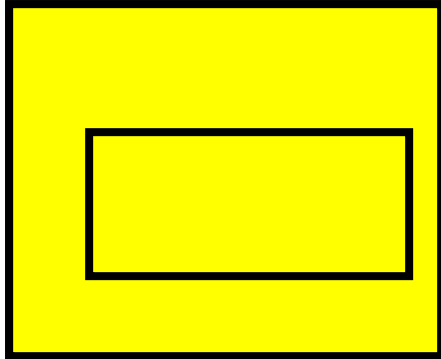
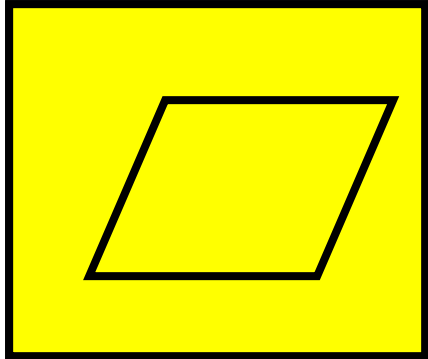
C



D

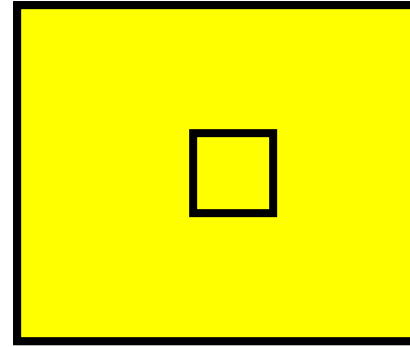
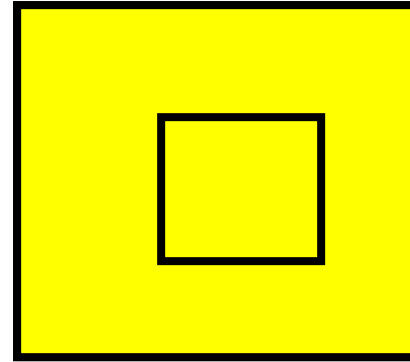
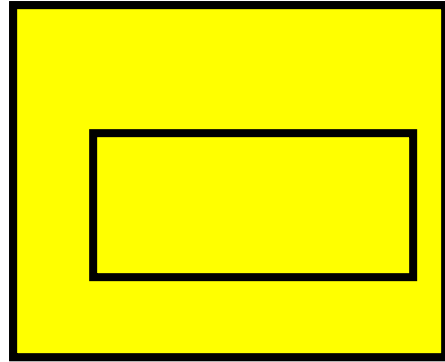
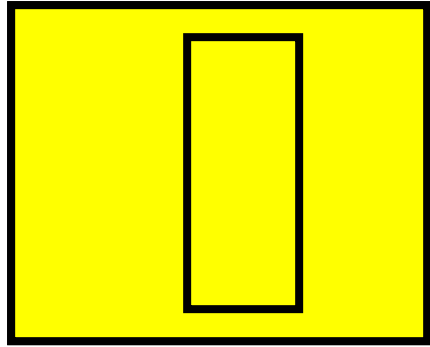


Which of the quadrilaterals have 2 sets of parallel sides?



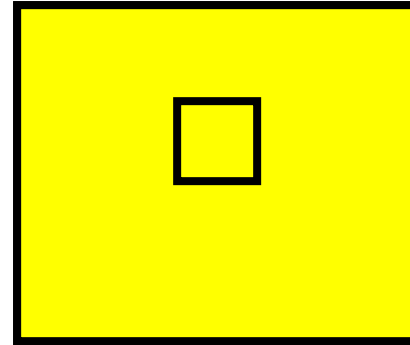
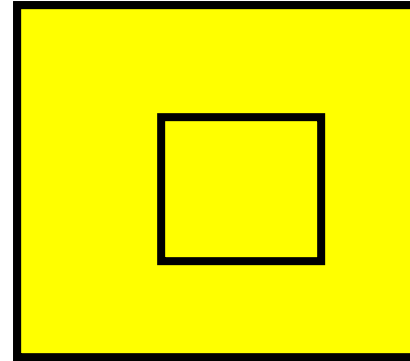
Parallelograms

Which of the parallelograms have 4 right angles?



Rectangles

Which of the rectangles have 4 congruent sides?



Squares

Collect all of the parallelograms. Which of the parallelograms have 4 congruent sides?

Rhombi

