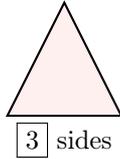


# 2D SHAPES

## A PLANE GEOMETRY

### A.1 FINDING THE SIDES

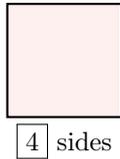
**Ex 1:** How many sides does this shape have?



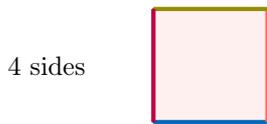
*Answer:* Count each straight line to find the number of sides.



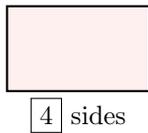
**Ex 2:** How many sides does this shape have?



*Answer:* Count each straight line to find the number of sides.



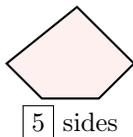
**Ex 3:** How many sides does this shape have?



*Answer:* Count each straight line to find the number of sides.



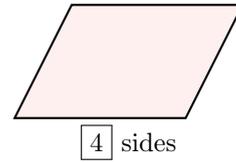
**Ex 4:** How many sides does this shape have?



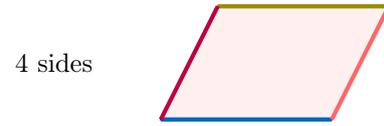
*Answer:* Count each straight line to find the number of sides.



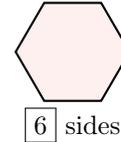
**Ex 5:** How many sides does this shape have?



*Answer:* Count each straight line to find the number of sides.



**Ex 6:** How many sides does this shape have?

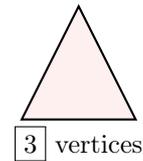


*Answer:* Count each straight line to find the number of sides.

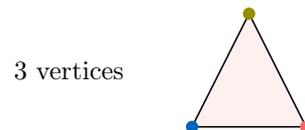


### A.2 FINDING THE VERTICES

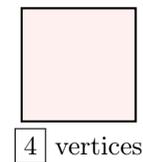
**Ex 7:** How many vertices does this shape have?



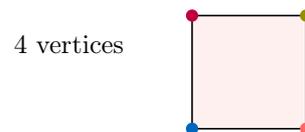
*Answer:* Count each point where two sides meet



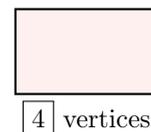
**Ex 8:** How many vertices does this shape have?



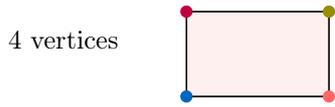
*Answer:* Count each point where two sides meet.



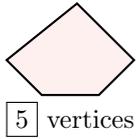
**Ex 9:** How many vertices does this shape have?



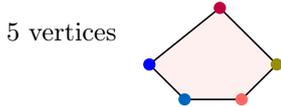
Answer: Count each point where two sides meet.



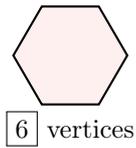
Ex 10: How many vertices does this shape have?



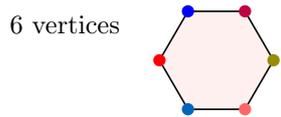
Answer: Count each point where two sides meet.



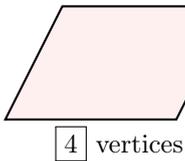
Ex 11: How many vertices does this shape have?



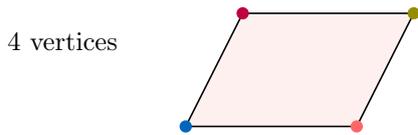
Answer: Count each point where two sides meet.



Ex 12: How many vertices does this shape have?



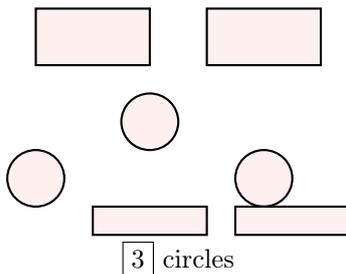
Answer: Count each point where two sides meet.



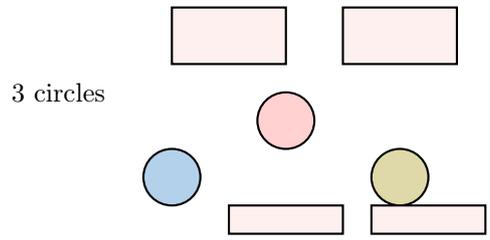
## B CLASSIFICATION

### B.1 COUNTING SHAPES IN DRAWINGS

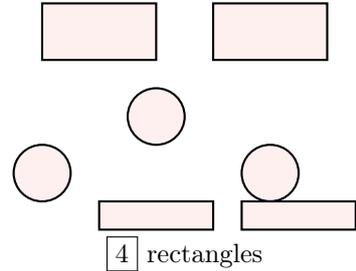
Ex 13: How many circles are in the picture?



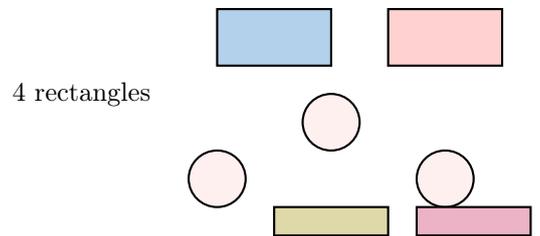
Answer: Count each round shape with no sides to find the number of circles.



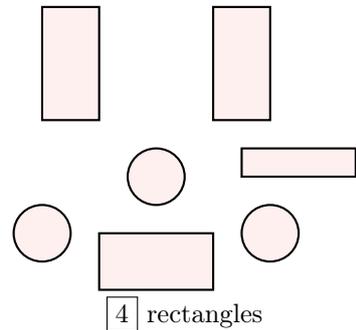
Ex 14: How many rectangles are in the picture?



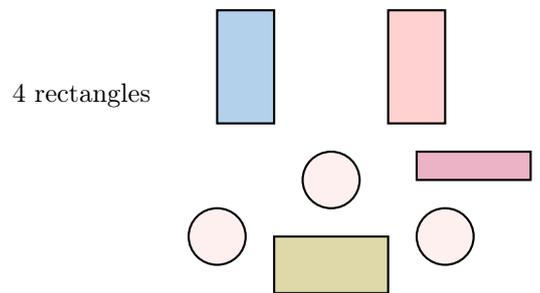
Answer: Count each rectangle.



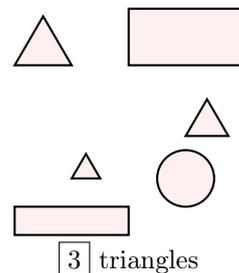
Ex 15: How many rectangles are in the picture?



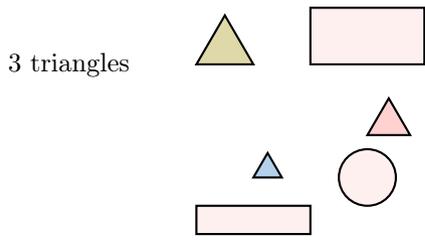
Answer: Count each rectangle.



Ex 16: How many triangles are in the picture?

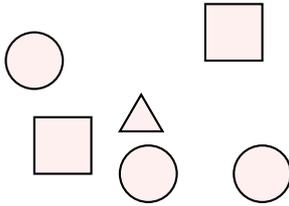


*Answer:* Count each shape with 3 sides and 3 vertices to find the number of triangles.



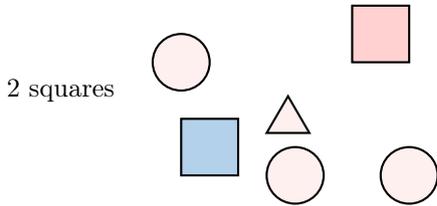
3 triangles

**Ex 17:** How many squares are in the picture?



2 squares

*Answer:* Count each shape with 4 equal sides and 4 vertices to find the number of squares.



2 squares

## B.2 FINDING SHAPES IN PICTURES

**Ex 18:** Can you find all the circles in the picture?



2 circles

*Answer:* Circles are round shapes with no sides. The soccer ball and the sun are circles because they are round.

2 circles

**Ex 19:** Can you find all the triangles in the picture?



2 triangles

*Answer:* Triangles are shapes with 3 sides and 3 vertices. The roof and the tree are triangles because they have 3 sides.

2 triangles

**Ex 20:** Can you find all the rectangles in the picture?

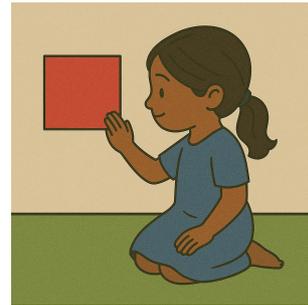


3 rectangles

*Answer:* Rectangles are shapes with 4 sides and 4 vertices, with two sides longer than the others. The red, yellow, and blue wooden sticks are rectangles because they have 4 sides with two longer sides.

3 rectangles

**Ex 21:** Can you find all the squares in the picture?



1 square

*Answer:* Squares are shapes with 4 equal sides and 4 vertices. The poster is a square because it has 4 sides that are all the same length.

1 square

## C DRAWING SHAPES ON GRAPH PAPER

### C.1 DRAWING SIMPLE SHAPES

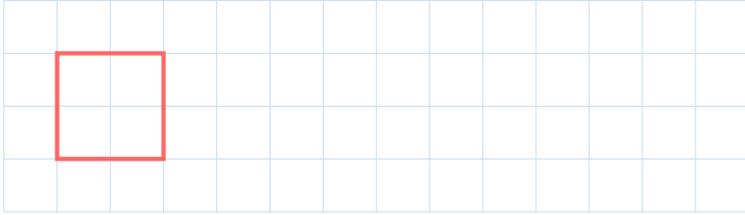
**Ex 22:** Can you draw this triangle?



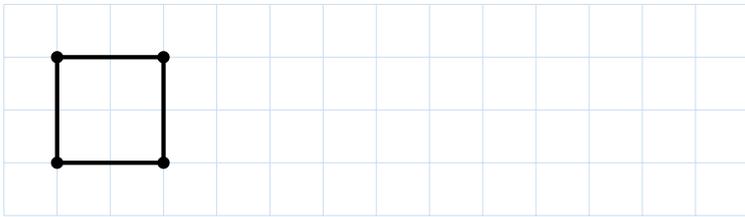
*Answer:* A triangle is a shape with 3 sides and 3 vertices. To draw a triangle like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



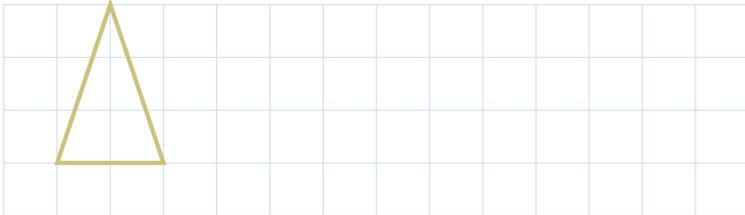
**Ex 23:** Can you draw this square?



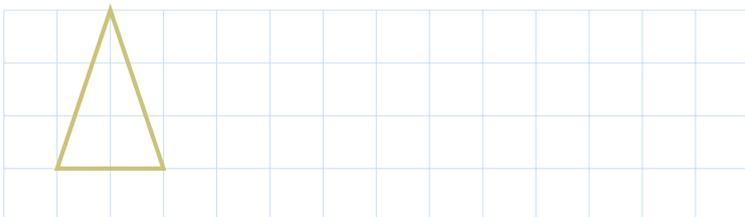
*Answer:* A square is a shape with 4 equal sides and 4 vertices. To draw a square like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



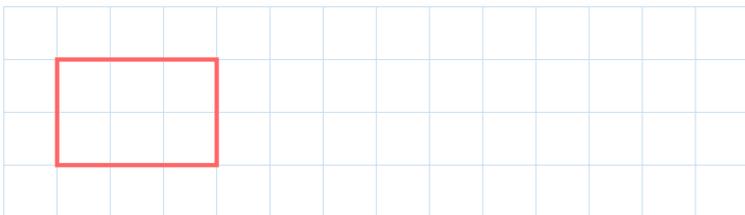
**Ex 24:** Can you draw this Christmas tree?



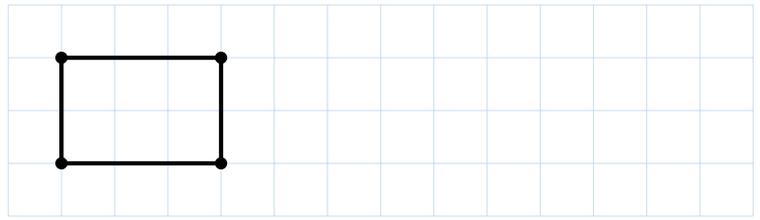
*Answer:* A Christmas tree is a green triangle with 3 sides and 3 vertices. To draw a Christmas tree like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



**Ex 25:** Can you draw this rectangle?

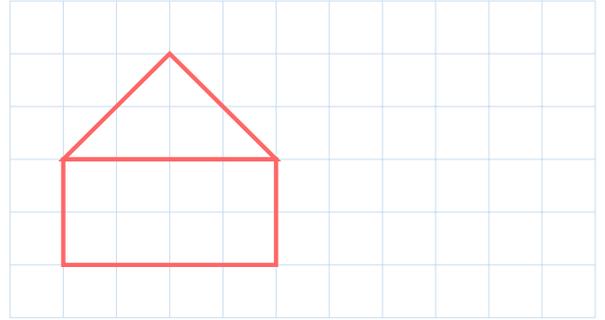


*Answer:* A rectangle is a shape with 4 sides and 4 vertices. To draw a rectangle like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.

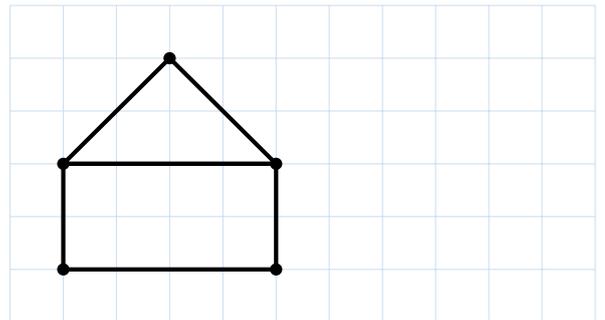


## C.2 DRAWING COMPOSITE SHAPES

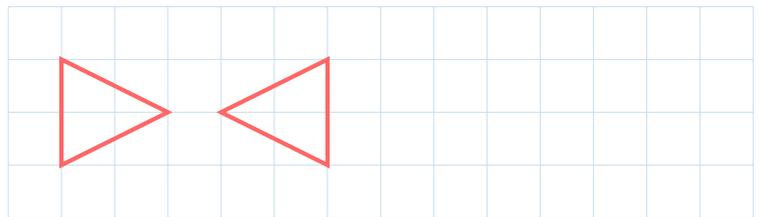
**Ex 26:** Can you draw a house like this one?



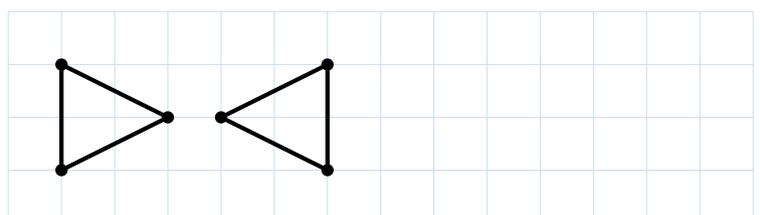
*Answer:* A house is a shape with a rectangle base and a triangle roof. To draw a house like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



**Ex 27:** Can you draw these two triangles?



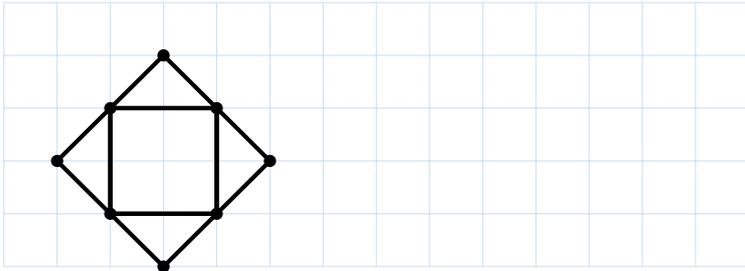
*Answer:* Two triangles are shapes with 3 sides and 3 vertices each. To draw two triangles like these, use the grid. You can place them anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



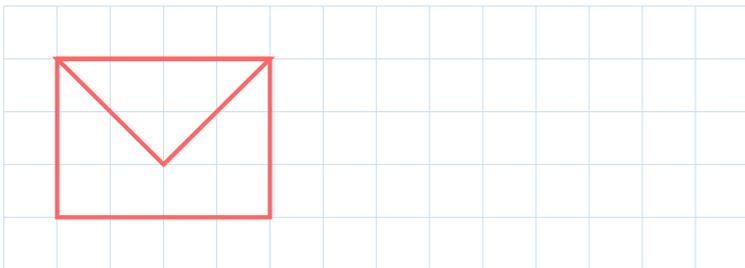
**Ex 28:** Can you draw this square with four triangles?



*Answer:* A square with four triangles is a shape with a central square and a triangle on each side. To draw a square with four triangles like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.



**Ex 29:** Can you draw this envelope?



*Answer:* An envelope is a shape with a rectangle and a triangle inside it. To draw an envelope like this one, use the grid. You can place it anywhere on the grid. First, put the vertices. Then use your ruler to draw the sides.

