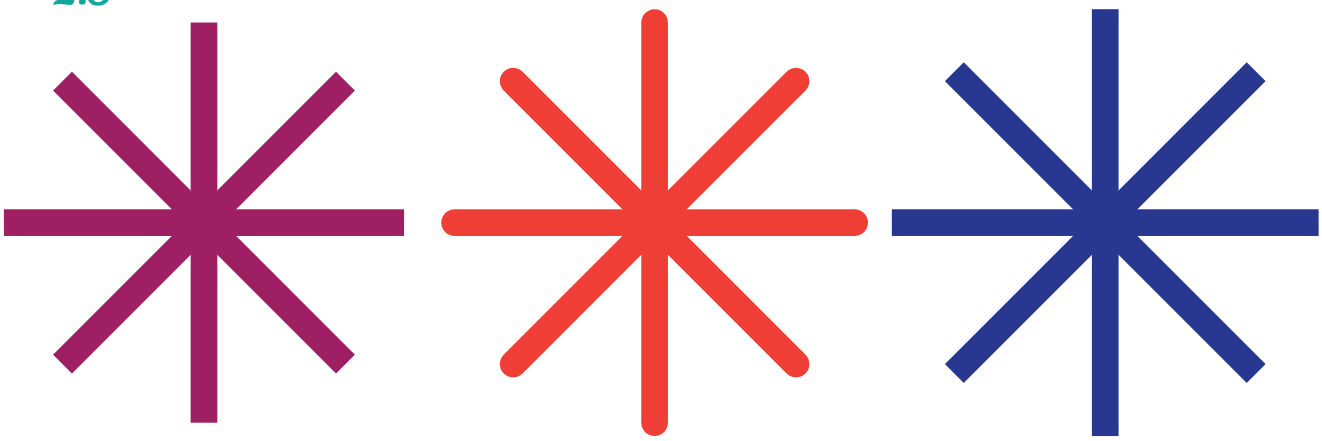
lesson 4

STROKE-LINECUP

1.2

1.3



In the first module, you can see three svg elements that contain g elements with the lines inside of them. The st*(standard) classes are applied to the g elements to style all elements that are inside the g elements.
1.1 You should add a stroke-width property that is equal to 40 to every st* class.
1.2 Add the stroke-linecap property with the value of "butt" to the st0 class, then add the stroke-linecap property with the value of "round" to the st1 class and add the stroke-linecap property with the value of "square" to the st2 class. You can see that the result isn't that we expected.
1.3 You should change the code to fix this problem.
There is only one restriction. You shouldn't change the line length.

lesson 4

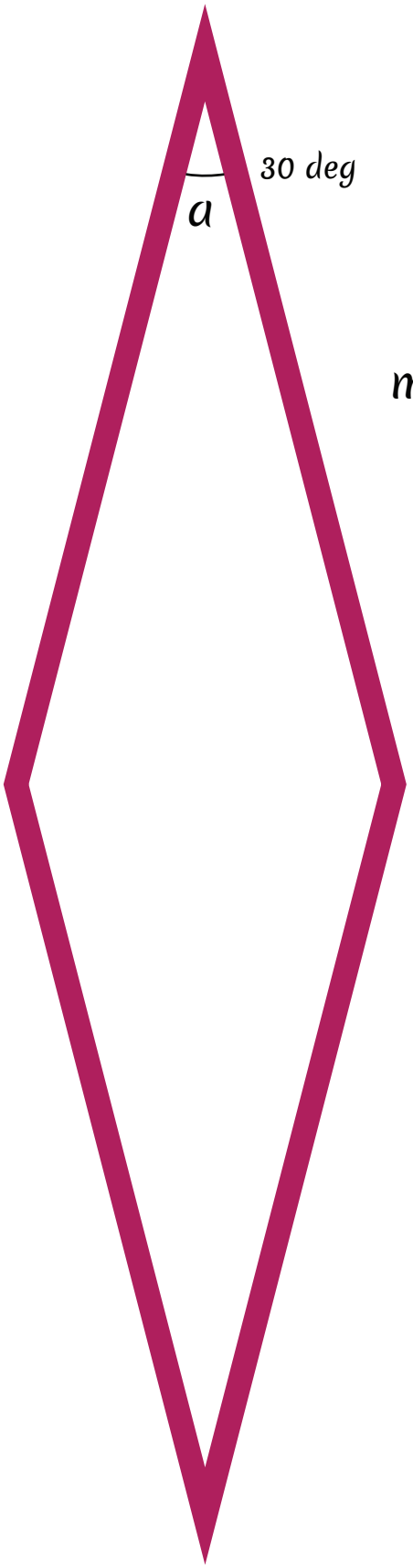
STROKE-LINECUP

In the second lesson, you can see two polygon elements. The first polygon element has the st0 class and the second polygon element has the st1 class.
2.1 You should change the value of the stroke-linejoin to round inside the declaration blocks of the st0 and st1 class selectors.
2.2 Then you should change the value of the stroke-linejoin to miter inside the declaration blocks of the st0 and st1 class selectors.
2.3 You should add the stroke -miterlimit property with a value of 1 to both declaration block of the class selectors.
What changes can you see?

Now, the stroke-linejoin works the same if its value will be equal to bevel.

lesson 4

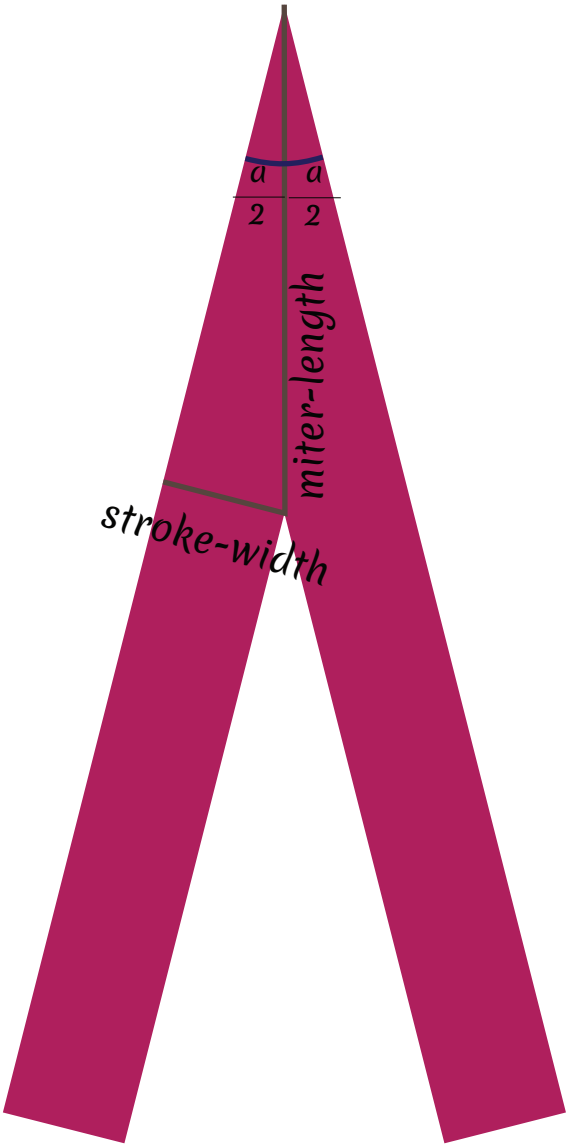
STROKE-LINEJOIN



In the third module:

1.1 The figure doesn't fit into the viewBox after we add a stroke -width property . To do this we should calculate the miter-length by the formula

$$\text{miter length} = \frac{\text{stroke-width}}{\sin\frac{a}{2}}$$



lesson 4

STROKE-LINEJOIN

To calculate the sine of the 15 degrees, you can use online calculators. For example you can use this online calculator https://www.rapidtables.com/calc/math/Sin_Calculator.html

---

1.2When we find the miter-length we should change the size of the viewBox size and its position. Actually, this assignment is much more difficult than you may think. You should solve this problem by your own because it's a problem-solving assignment I add the border to the outermost SVG element to help you to see if you do this right or wrong. When you get the answers you can check whether you have solved it correctly.
So good luck!
You can use the space below for drawing and calculating.