## Faerie Rags 'n' friends $^{2}$ Sattern by Sinéad Gannon



## Materials List

*Tulle
*Shirring elastic
*Thread to match

## Tools

*Scissors
*Sewing needle
*Embroidery needle or small bodkin for inserting elastic


I'm going to share the math formula for creating a full tutu on anyone, but then l'll give you a simplified version that l've found works on dolls 16 cm and smaller.

First you will need the waist measurement of the doll or person you want to make the tutu for, this becomes the circumference of our first circle. Using the formula $r=C / 2 \pi$ we can find the radius of that circle. Now we want the concentric circle at the length that we want our tutu. The distance from waist to mid thigh or knee added to our first circle's radius measurement equals the the second circle's radius. Using the same formula as before, $\mathrm{r}=\mathrm{C} / 2 \pi$, we can find the circumference of the second circle. This circumference measurement is the length of the tulle necessary for a full circle tutu. If you want it to have even more fullness, like in the photo you have to double or triple that number. I tripled it.

The following instructions will bring clarity if you're lost after that.


I'll be using Centimeters, but it will still work if you're using inches.

Take a waist measurement using a flexible tape measure. The narrow ones work more accurately on small dolls, but you can use a string, ribbon or narrow piece of paper to find the distance and then measure your string, etc... with a ruler.

The doll in the example is a 6 inch doll and their waist measures 8.5 cm

To completely simplify the process, multiply the waist measure times 3 for a full circle skirt, (like a poodle skirt) or times 10 for the ruffled fullness in the picture.
(I later did times 8 for a 4 inch doll and it still had a very full tutu)

So, for the circle skirt it would be 25.5 cm and for the ruffled fullness of our picture, it would be 85 cm for the length of the tulle.

The width of the tulle should be twice what your skirt length measurement was, I measured from waist to just above the knee, 3.25 cm and doubled, it would be 6.5 cm .

I also want more layers, so I cut two pieces, 6.5 cm wide and 85 cm long.

Stitch the short ends together to form two circles of tulle. In the picture, the clips are where the ends are stitched together.


Finger press your seam open and fold the tube in half along the length, with the seam to the inside of the fold.

Pin or clip to hold the fold.

Layer and pin the two pieces together, matching the folded edges.

Using a running stitch to gather the folded edge with thread, stitch through all the folded layers, using as small of stitches as possible, $1-2 \mathrm{~mm}$.


Pull up the gathers, but leave it generously loose to be able to put it on the doll easily. Overhand knot the threads together.
Trim excess thread.

Using a running stitch again to gather the folded edge with shirring elastic, stitch around folded edge, using bigger stitches, 4 mm


Close up.


Pull up elastic to fit waist, being sure to leave stretch room in the elastic and overhand knot the ends together.

Trim away excess elastic.

The layers will look like this.


## Stitch Guides



## Running Stitch

Insert your needle down at 1 and come back
out at 2.
2 becomes 1 and you repeat.


## Back Stitch:

*Bring your needle up at 1
*Insert your needle down at 2, bringing the tip back up at 3.
*3 becomes 1 and repeat.

## Overhand Knot



