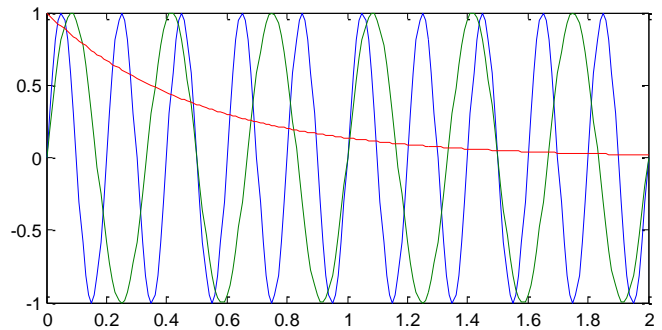


1) errors

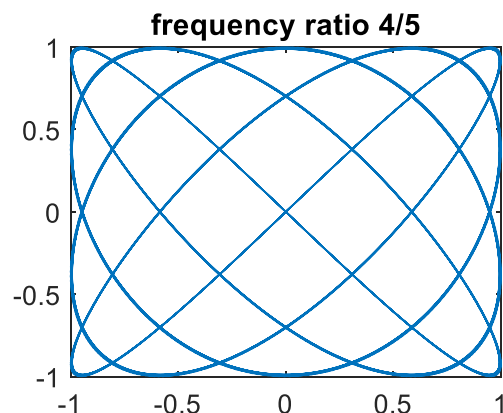
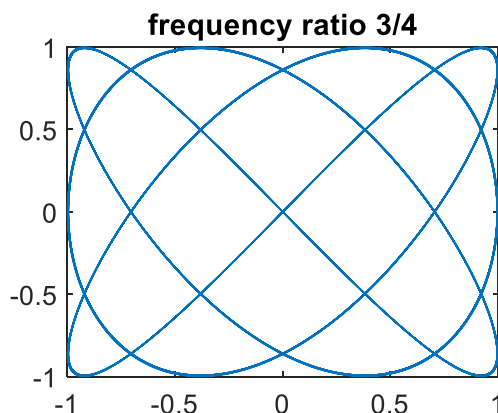
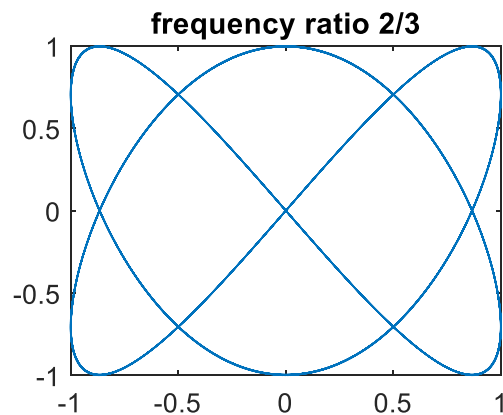
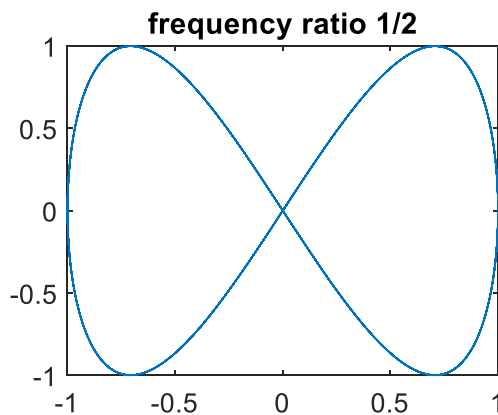
```
t=0:0.01:2;  
sinfkt=sin(2*pi*5*t);  
cosfkt=sin(2*pi*3*t);  
expfkt=exp(-2*t);  
plot(t,[sinfkt, cosfkt, expfkt])
```



- Why does the above code give an error message?
- What do you have to change to get the above plot?
- Why do you get a strange plot if you replace the first line with $t=0:0.5:10$;

2) Lissajous

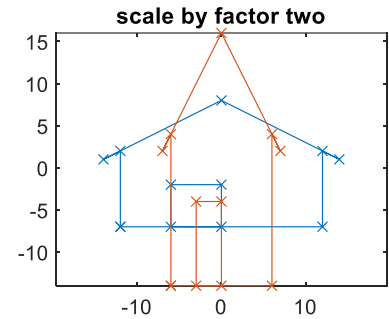
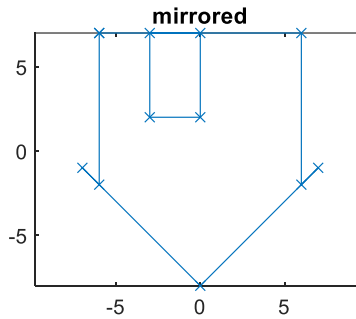
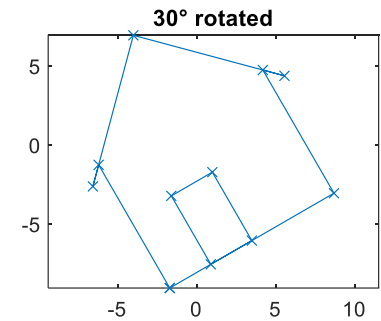
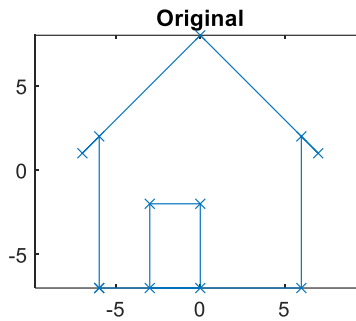
Draw the [Lissajous-figures](#) for the given frequency ratio.



3) mirror, rotate, scale

Plot the house with the vector given in sim05_graphics.m

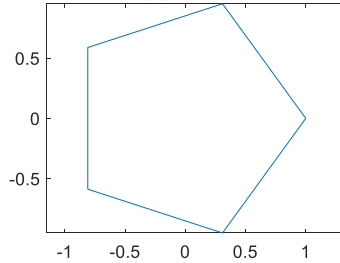
Create the other plots by matrix multiplication.



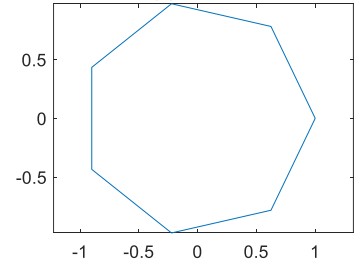
4) Regular polygon

a) Draw a regular polygon with increasing number of sides.

perimeter of polygon with 5 sides ist 5.878

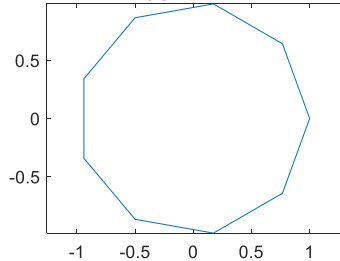


perimeter of polygon with 7 sides ist 6.074



b) Calculate the perimeter.

perimeter of polygon with 9 sides ist 6.156



perimeter of polygon with 11 sides ist 6.198

