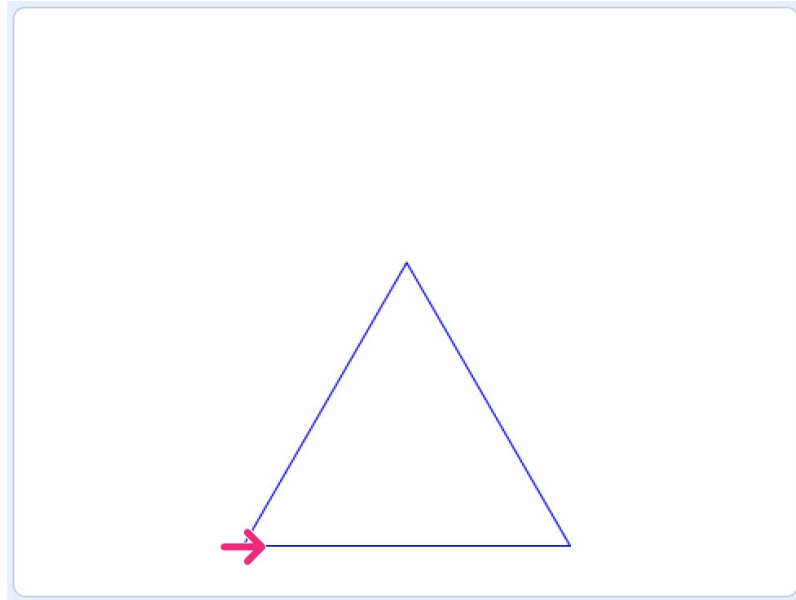
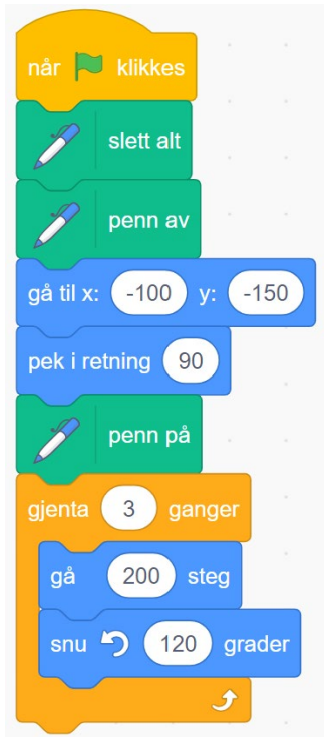
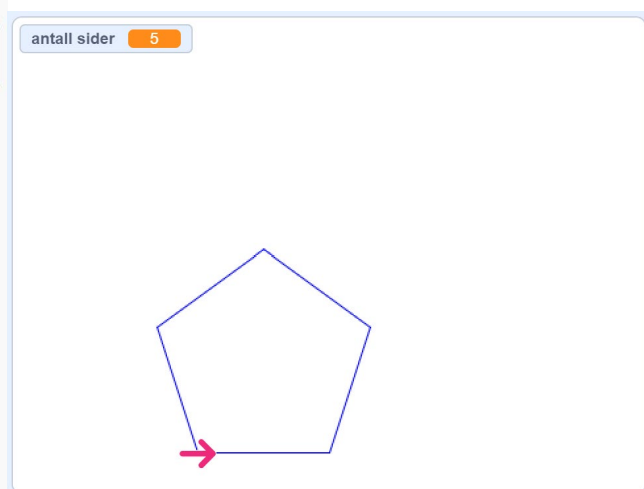


## Scratch – filer benyttet til modul 3

### 03-1 manuell Reg mang



### 03-2 input antall sider

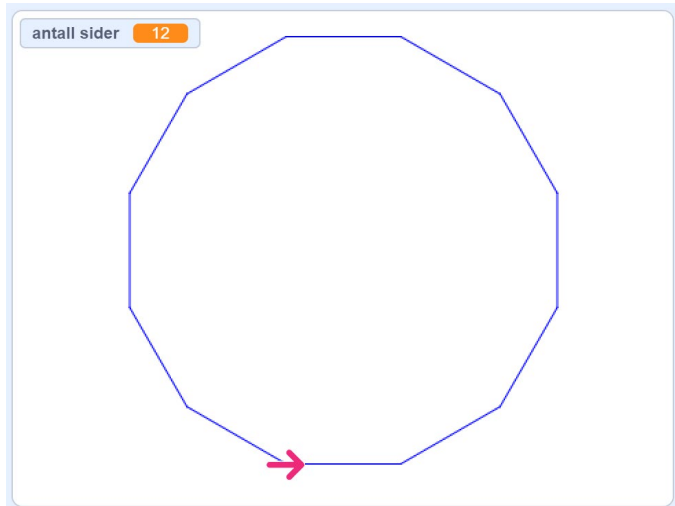


### 03-3 tilpasset sidelengde

```

når flaget klikkes
  slett alt
  penn av
  pek i retning 90
  gå til x: 0 y: 0
  spør "Hvor mange sider skal figuren ha?" og vent
  sett "antall sider" til svar
  sett "sidelengde" til 1000 / "antall sider"
  gå til x: "sidelengde" / -2 y: -150
  penn på
  gjenta "antall sider" ganger
    gå "sidelengde" steg
    snu 360 / "antall sider" grader

```

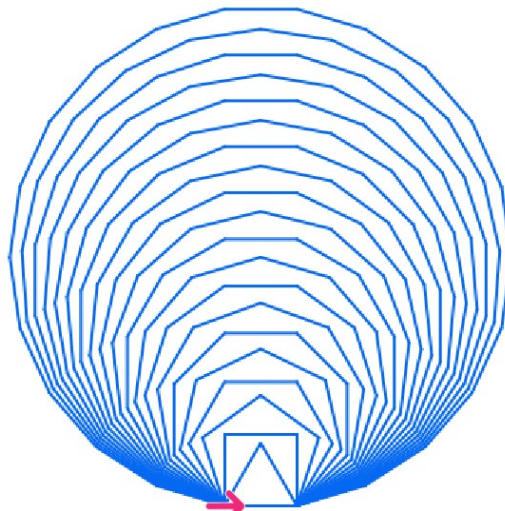


### 03-4 3-20 sider

```

når flaget klikkes
  slett alt
  penn av
  sett "antall sider" til 3
  gå til x: -25 y: -175
  penn på
  sett pennbredde til 1
  gjenta 20 ganger
    gjenta "antall sider" ganger
      gå 50 steg
      snu 360 / "antall sider" grader
    endre "antall sider" med 1

```

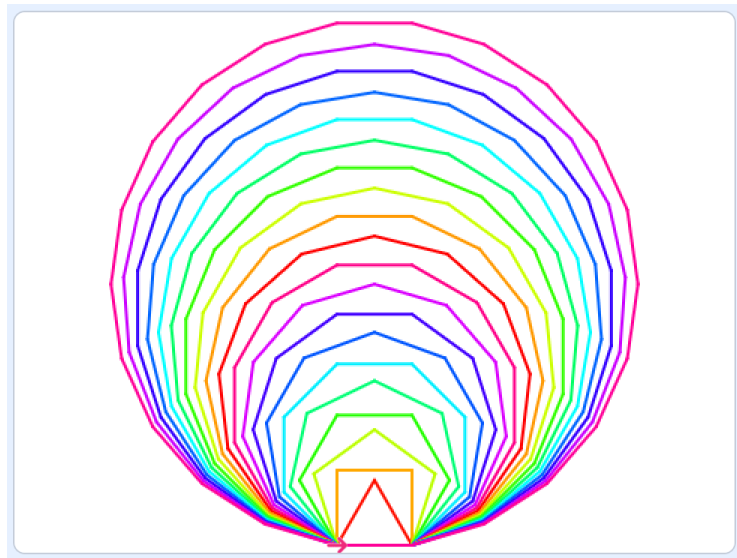


### 03-5 3-20 sider farge

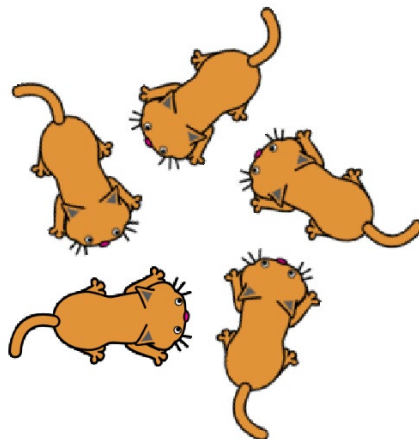
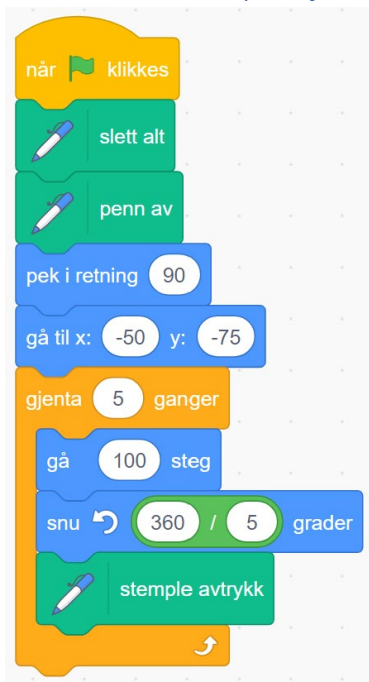
```

når flagg klikkes
  slett alt
  penn av
  sett antall sider til 3
  gå til x: -25 y: -175
  pek i retning 90
  penn på
  sett pennens farge til 1
  sett pennbredde til 2
  gjenta 20 ganger
    gjenta antall sider ganger
      gå 50 steg
      snu 360 / antall sider grader
    ende antall sider med 1
  ende pennens farge med 10

```



### 03-6 5-kant stemple hjørner



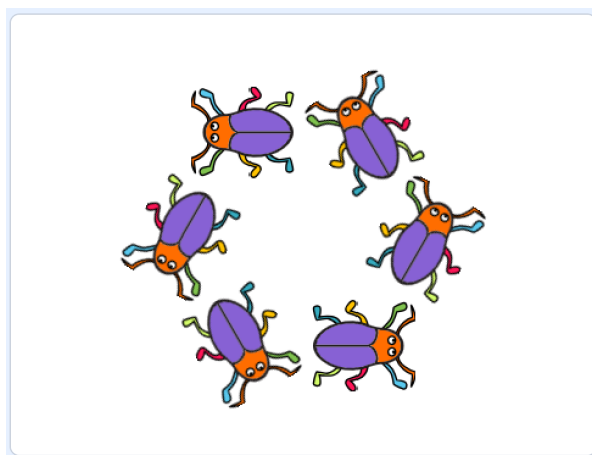
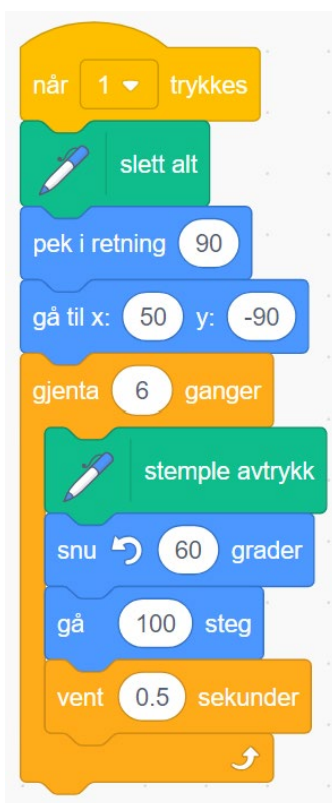
Figur Cat 2

### 03-7A-F stemple ideer

Dette programmer inneholder seks figurer med hvert sitt program. Hver av figurene blir aktivert ved å trykke på en av tastene 1-6

Tast 1

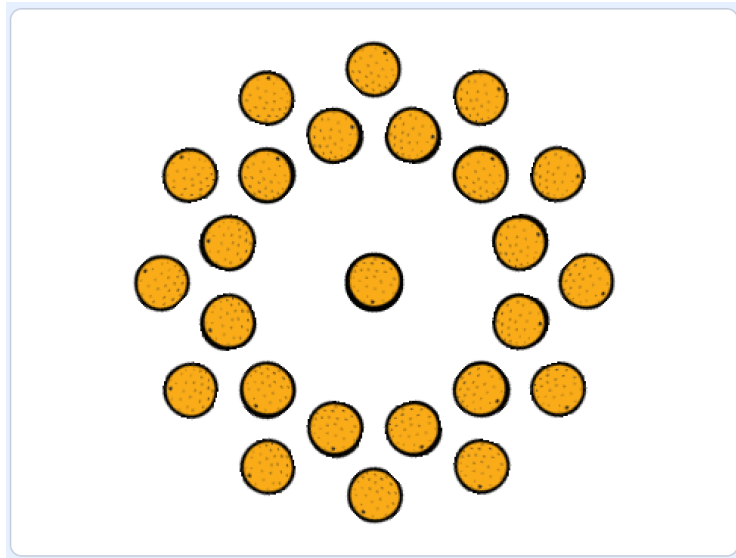
Figur Beetle



Figur Beetle

### Tast 2

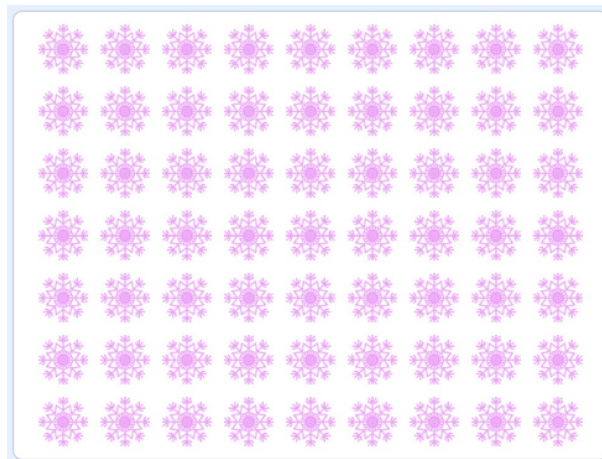
```
when 2 is pressed
  clear all
  pen up
  go to x: 0 y: 0
  set heading to -45
  repeat 12 times
    repeat 4 times
      go 100 steps
      turn 90 degrees
      stamp
    turn 30 degrees
```



Figur Orange

### Tast 3

```
when 3 is pressed
  clear all
  go to x: -200 y: -150
  set color to effect to 50
  hide
  repeat 7 times
    repeat 9 times
      stamp
      change x by 50
    set x to -200
    change y by 50
```



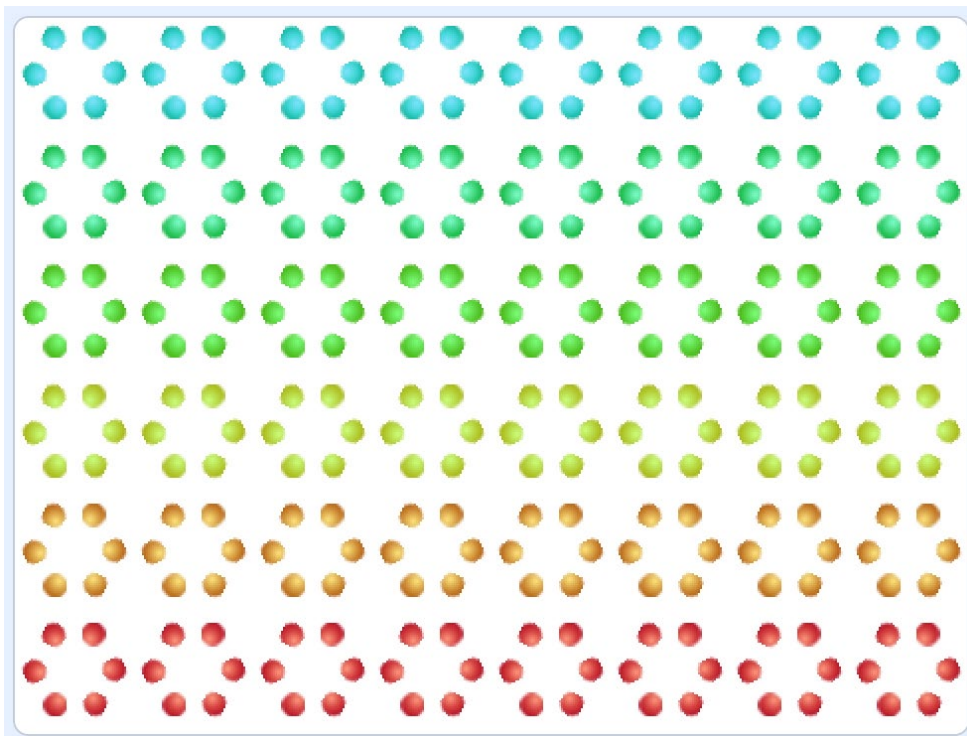
Figur Snowflake

# Tast 4

```

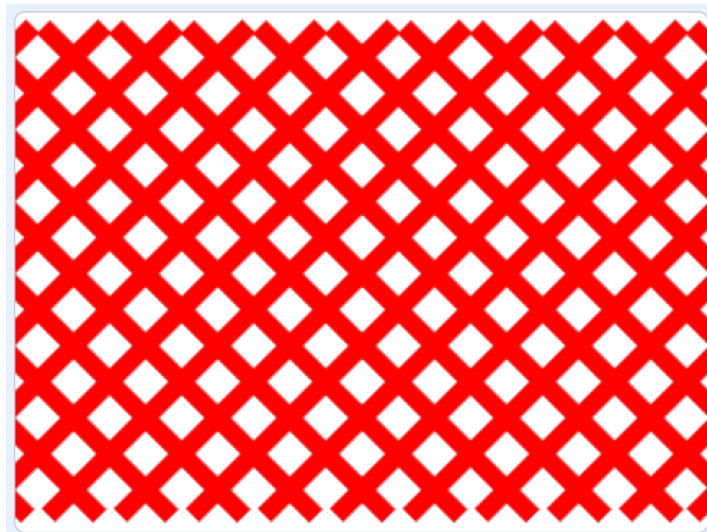
når 4 trykkes
  slett alt
  penn av
  sett farge til effekt til 50
  skjul
  gå til x: -220 y: -165
  pek i retning 90
  gjenta 6 ganger
    gjenta 8 ganger
      send melding stemple sekskant og vent
    sett x til -220
    endre y med 60
    endre farge til effekt med 20
  når jeg mottar stemple sekskant
    gjenta 6 ganger
      stemple avtrykk
      gå 20 steg
      snu 360 / 6 grader
    endre x med 60

```



Figur Ball

## Tast 5



Figur Line

Tast 6

```
when 6 is pressed
  clear all
  go to x: -210 y: -140
  point in direction 140
  change costume to dove-a
  repeat 7 times
    stamp
    change x by 65
    change y by 45
    next costume
  send message1

when I receive message1
  change costume to dove-a
  go to x: -80 y: -140
  point in direction 160
  repeat 5 times
    stamp
    change x by 65
    change y by 25
    next costume
  send message2

when I receive message2
  change costume to dove-a
  go to x: -185 y: -30
  point in direction 130
  repeat 4 times
    stamp
    change x by 55
    change y by 55
    next costume
```

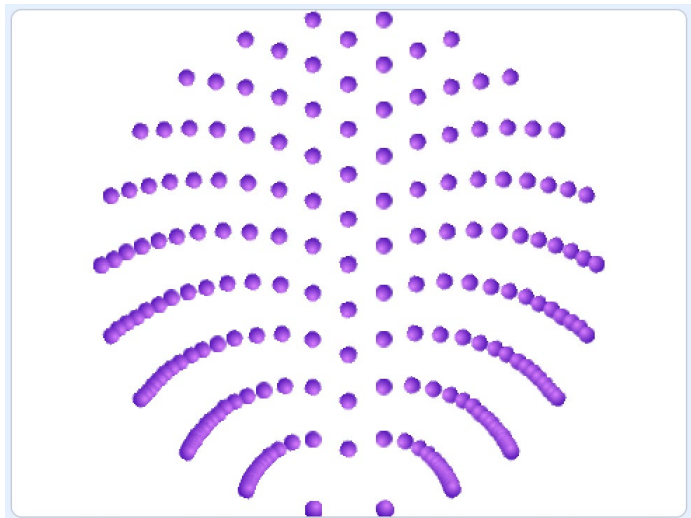


Figur Dove



### 03-6G stemple ideer

```
when clicked
  delete all
  pen down
  set costume to ball-e
  set number of sides to 3
  go to x: -25 y: -175
  repeat 20 times
    repeat number of sides times
      go 50 steps
      turn 360 / number of sides degrees
      stamp
    increase number of sides by 1
```



### 03-6H stemple ideer Reg Mang

Dette programmet bruker to figurer med et program til hver figur:



```
when green flag clicked
  clear all
  go to x: -200 y: -155
  repeat 8 times
    repeat 5 times
      stamp butterfly
      go 100 steps
    end repeat
  set x to -200
  change y by 45
end repeat
```

```
when green flag clicked
  go to x: -150 y: -155
  repeat 4 times
    repeat 8 times
      stamp ladybug
      go 45 steps
    end repeat
  change x by 100
  set y to -155
end repeat
```

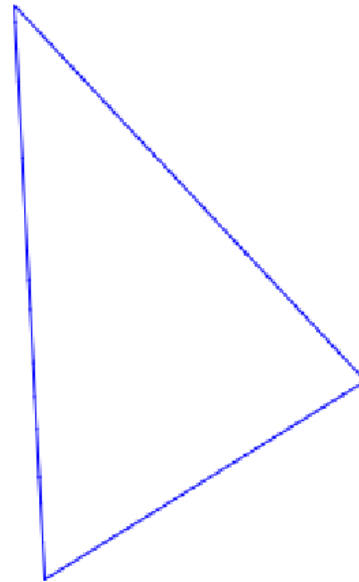


### 03-8 vilkårlig trekant

```

når flaget klikkes
  slett alt
  penn av
  gå til tilfeldig sted
  sett x1-verdi til x-posisjon
  sett y1-verdi til y-posisjon
  penn på
  gli 0.5 sekunder til tilfeldig sted
  gli 0.5 sekunder til tilfeldig sted
  gli 0.5 sekunder til x: x1-verdi y: y1-verdi

```

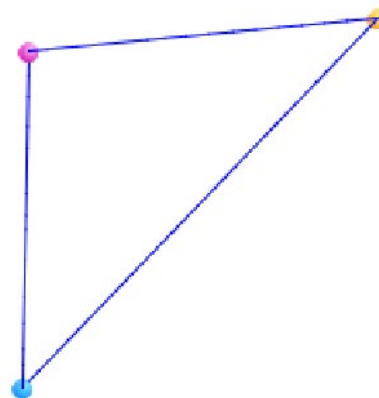


### 03-8a vilkårlig trekant hjørner

```

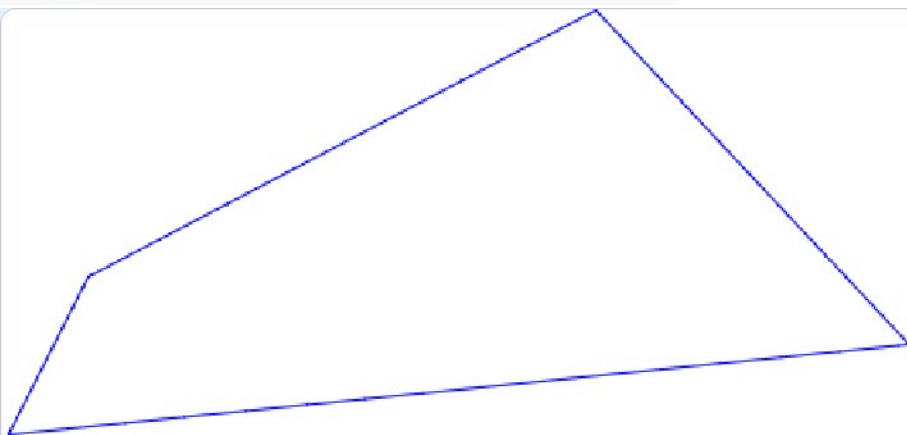
når flaget klikkes
  slett alt
  penn av
  gå til tilfeldig sted
  bytt drakt til ball-a
  stemple avtrykk
  penn på
  sett x1-verdi til x-posisjon
  sett y1-verdi til y-posisjon
  gjenta 2 ganger
    gli 0.5 sekunder til tilfeldig sted
    neste drakt
    stemple avtrykk
  gli 0.5 sekunder til x: x1-verdi y: y1-verdi
  skjul

```



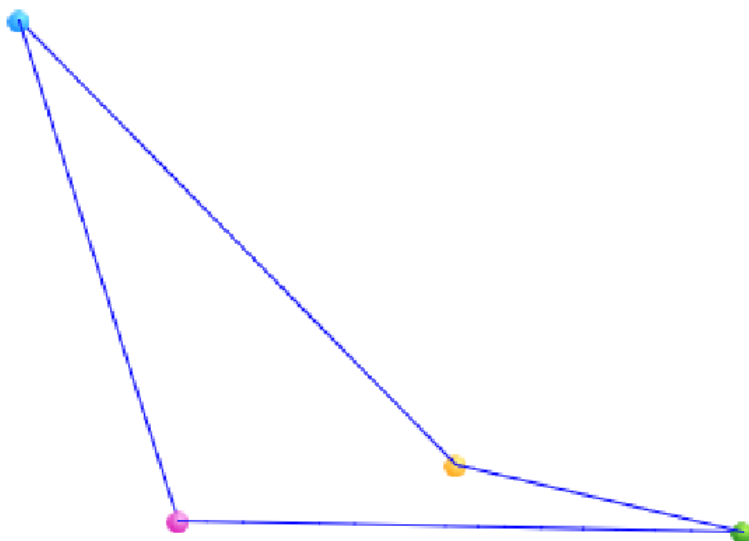
### 03-9 vilkårlig firkant

```
when clicked
  delete all
  pen down
  hide
  go to random place
  change costume to ball-a
  pen up
  set x1-value to x-position
  set y1-value to y-position
  repeat 3 times
    glide 0.5 seconds to random place
    next costume
  glide 0.5 seconds to x: x1-value y: y1-value
```



### 03-9a vilkårlig firkant hjørner

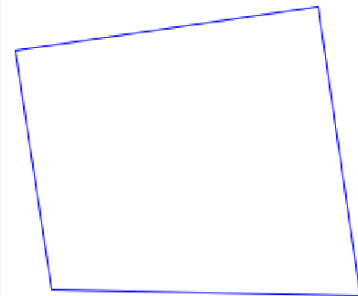
```
whenClicked
  deleteAll
  penDown
  goto randomPlace
  changeCostumeTo ball-a
  stamp
  penUp
  set x-value to x-position
  set y-value to y-position
  repeat 3 times
    glide 0.5 seconds to randomPlace
    nextCostume
    stamp
  glide 0.5 seconds to x: x-value y: y-value
  hide
```



### 03-10 konkav firkant

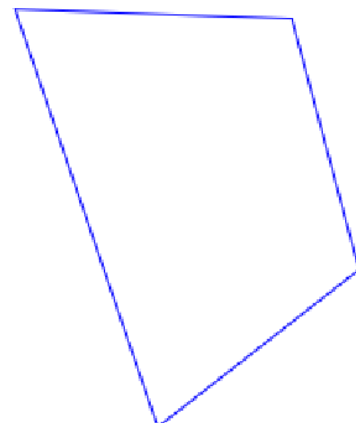
#### Gå tilfeldig sted

```
when clicked
  clear
  pen down
  goto x: random from -200 to -100 y: random from -50 to -150
  set x1-value to x-position
  set y1-value to y-position
  pen up
  goto x: random from 10 to 150 y: random from -10 to -150
  goto x: random from 10 to 150 y: random from 10 to 150
  goto x: random from -200 to -100 y: random from 10 to 150
  goto x: x1-value y: y1-value
```



#### Gå tilfeldig retning og lengde

```
when clicked
  clear
  pen down
  goto x: random from -150 to 0 y: random from -50 to -100
  set direction to random from 45 to 130
  set x1-value to x-position
  set y1-value to y-position
  pen up
  repeat 3 times
    go random from 60 to 140 steps
    turn random from 30 to 90 degrees
  go to x: x1-value y: y1-value
```

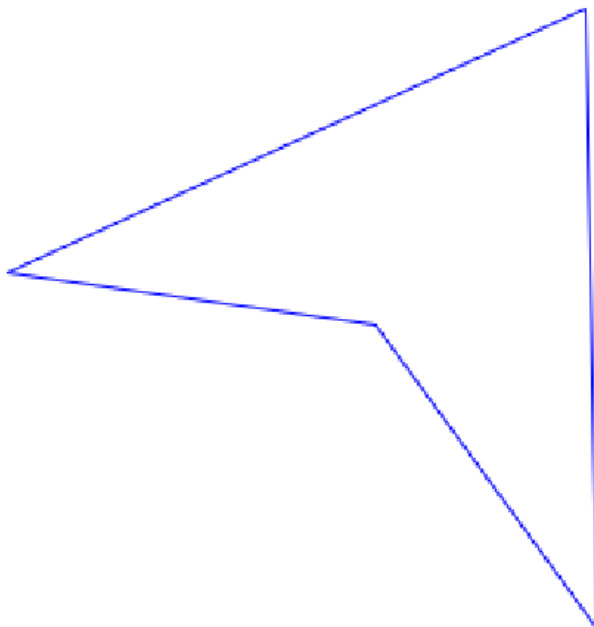


## 03-11 konveks firkant

Gå til tilfeldig sted

```
when green flag clicked
  delete all
  stop drawing
  go to x: random number from -200 to -150 y: random number from 0 to -5
  set x1-value to x-position
  set y1-value to y-position
  stop drawing
  go to x: random number from -80 to -20 y: random number from -5 to -30
  go to x: random number from 30 to 100 y: random number from -100 to -160
  go to x: random number from 0 to 200 y: random number from 20 to 150
  go to x: x1-value y: y1-value
```

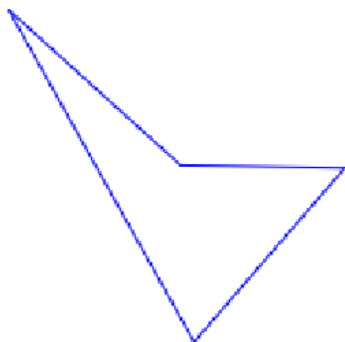
The image shows a Scratch script designed to draw a convex quadrilateral. The script starts with a 'when green flag clicked' event, followed by 'delete all' and 'stop drawing' blocks. It then uses a 'go to x: random number from -200 to -150 y: random number from 0 to -5' block to set the first vertex. This is followed by 'set x1-value to x-position' and 'set y1-value to y-position' blocks to store the coordinates of this vertex. The script then uses three more 'go to x: random number from ... y: random number from ...' blocks to set the other three vertices. Finally, it uses a 'go to x: x1-value y: y1-value' block to return to the first vertex, completing the quadrilateral.



```

når flagg klikkes
  slett alt
  penn av
  gå til x: tilfeldig tall fra -150 til 0 y: tilfeldig tall fra 50 til 150
  pek i retning 90
  snu tilfeldig tall fra 30 til 60 grader
  sett x1-verdi til x-posisjon
  sett y1-verdi til y-posisjon
  penn på
  gå tilfeldig tall fra 60 til 140 steg
  snu tilfeldig tall fra 30 til 60 grader
  gå tilfeldig tall fra 50 til 100 steg
  snu tilfeldig tall fra 100 til 150 grader
  gå tilfeldig tall fra 100 til 145 steg
  snu tilfeldig tall fra 100 til 150 grader
  gå til x: x1-verdi y: y1-verdi

```





### 03-12 Hvor tilfeldig er det?

```
when clicked
  delete all
  pen up
  set 'antall prikker' to 0
  repeat for all time
    go to 'tilfeldig sted'
    stamp
    next frame
  change 'antall prikker' by 1
```

