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# Circle:



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## Code to get it

```
# colourful_circle.py
from turtle import *

# choose a colour
pencolor("aquamarine")
fillcolor("aquamarine")

# draw the circle
begin_fill()
circle(100)
end_fill()

# Tell Python to stop waiting for turtle instructions
done()
```

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## Well done! :) Things you can try now:

- Change the color

Hint: Look for where it says pencolor and fillcolor.

- Change the size

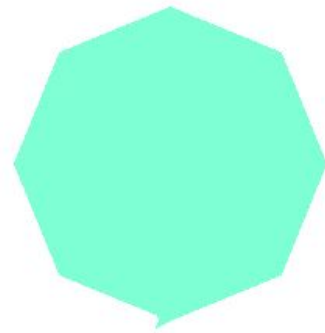
Hint: Look where it draws the circle.

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# Octagon:

The **circle()** command is a turtle function that treats a circle as a polygon with many sides. The **steps** argument tells how accurate to be - how many straight lines to make the circle from. So the octagon is a “circle” with 8 steps.



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## Code to get it

```
# colourful_octagon.py
from turtle import *

# choose a colour
pencolor("aquamarine")
fillcolor("aquamarine")

# draw the octagon
begin_fill()
circle(100, steps=8)
end_fill()

# Tell Python to stop waiting for turtle instructions
done()
```

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## Well done! :) Things you can try now:

- Change the color - Hint: Look for where it says pencolor and fillcolor.
  - Change the size - Hint: Look where it draws the “circle”.
  - Change the number of steps - Hint: Look where it draws the “circle”.
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# Diamond:

The **circle()** command is a turtle function that treats a circle as a polygon with many sides. The **steps** argument tells how accurate to be - how many straight lines to make the circle from. So the diamond is a “circle” with 4 steps.



## Code to get it

```
# colourful_diamond.py
from turtle import *

# choose a colour
pencolor("aquamarine")
fillcolor("aquamarine")

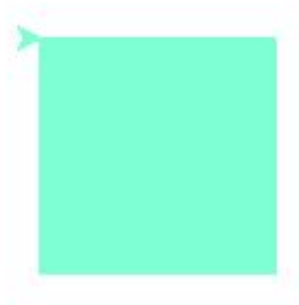
# draw the diamond
begin_fill()
circle(100, steps=4)
end_fill()

# Tell Python to stop waiting for turtle instructions
done()
```

## Well done! :) Things you can try now:

- Change the color - Hint: Look for where it says pencolor and fillcolor.
- Change the size - Hint: Look where it draws the “circle”.
- Change the number of steps - Hint: Look where it draws the “circle”.

# Square:



## Code to get it

```
# square.py
from turtle import *

# choose a colour
pencolor("aquamarine")
fillcolor("aquamarine")

# set up some variables
side_length = 100
n = 0

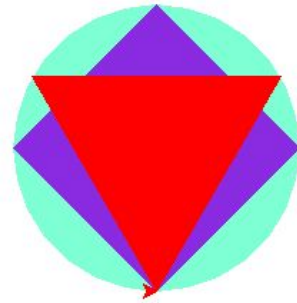
# tell Python it should color and draw
begin_fill()
while n < 4:
    forward(side_length)
    right(90)
    n = n+1
end_fill()

# tell Python to stop waiting for turtle instructions
done()
```

## Well done! :) Things you can try now:

- Change the color - Hint: Look for where it says pencolor and fillcolor.
- Change the size - Hint: Look where it sets the variable side\_length.
- What does it happen if you change 90 for another number?
- What does it happen if you change 4 for another number?
- The step  $n + 1$  is **very** important, can you tell why?

# Awesome stuff #1:



## Code to get it

```
# challenge3.py
from turtle import *

# Draw the pattern
pencolor("aquamarine")
fillcolor("aquamarine")
begin_fill()
circle(100)
end_fill()

pencolor("BlueViolet")
fillcolor("BlueViolet")
begin_fill()
circle(100, steps=4)
end_fill()

pencolor("red")
fillcolor("red")
begin_fill()
circle(100, steps=3)
end_fill()

# end
done()
```

## Well done! :) Things you can try now:

- Change the colors/sizes/steps
- Add more figures!