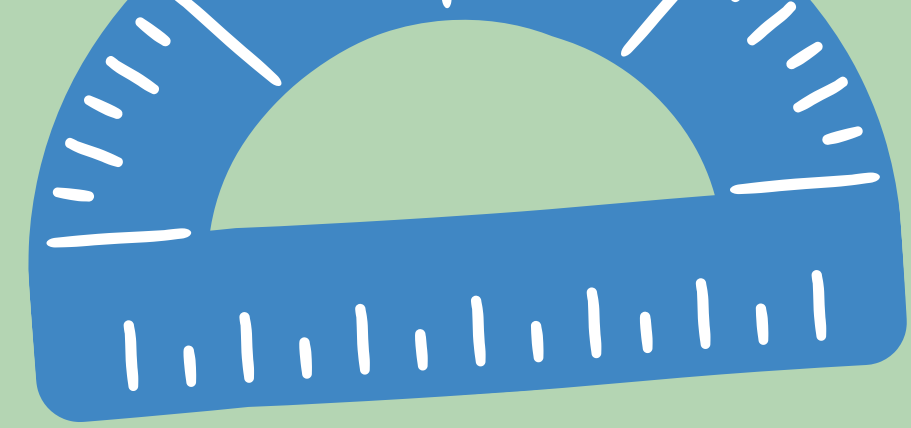


$\pi$

# Parts of a Circle





**Try to make a  
circle with your  
compass!**



# How to use a compass:



1

Open the arms.  
Place a pencil in  
the pencil holder.

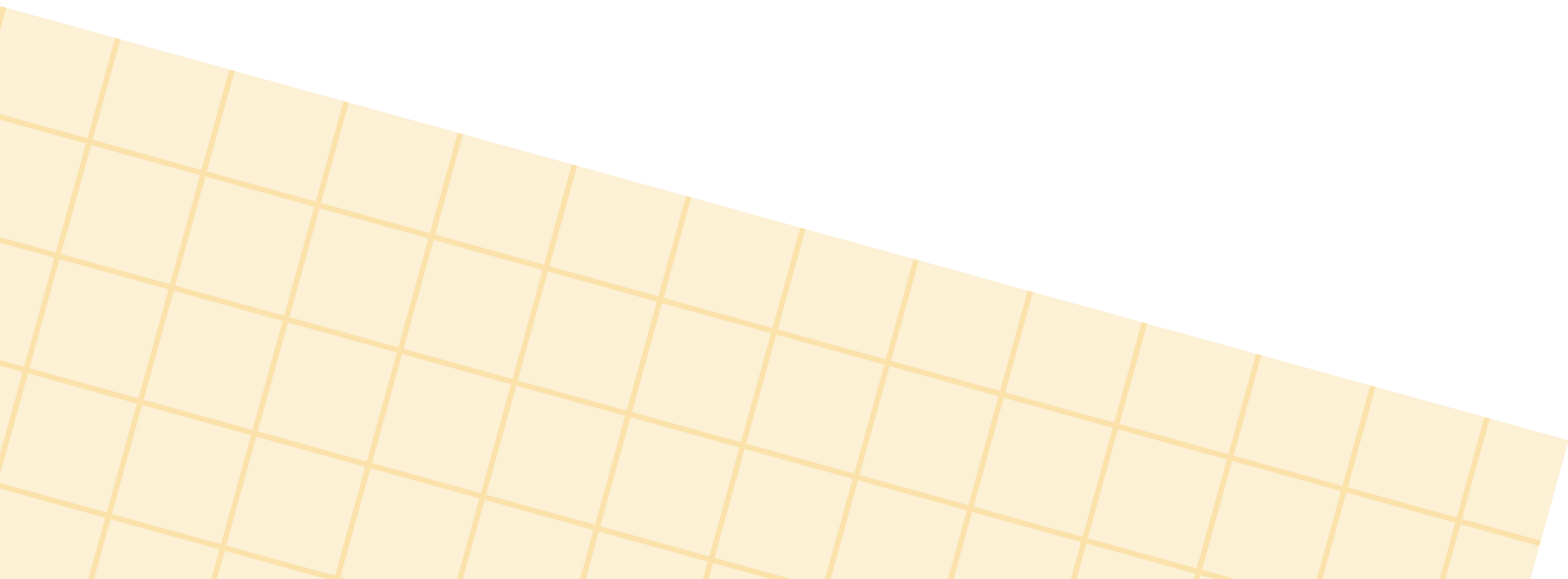
2

Put the needle on the  
page. Adjust the height  
of your pencil so that it  
touches the paper.

3

Hold the needle in  
place and rotate your  
pencil to make a circle.

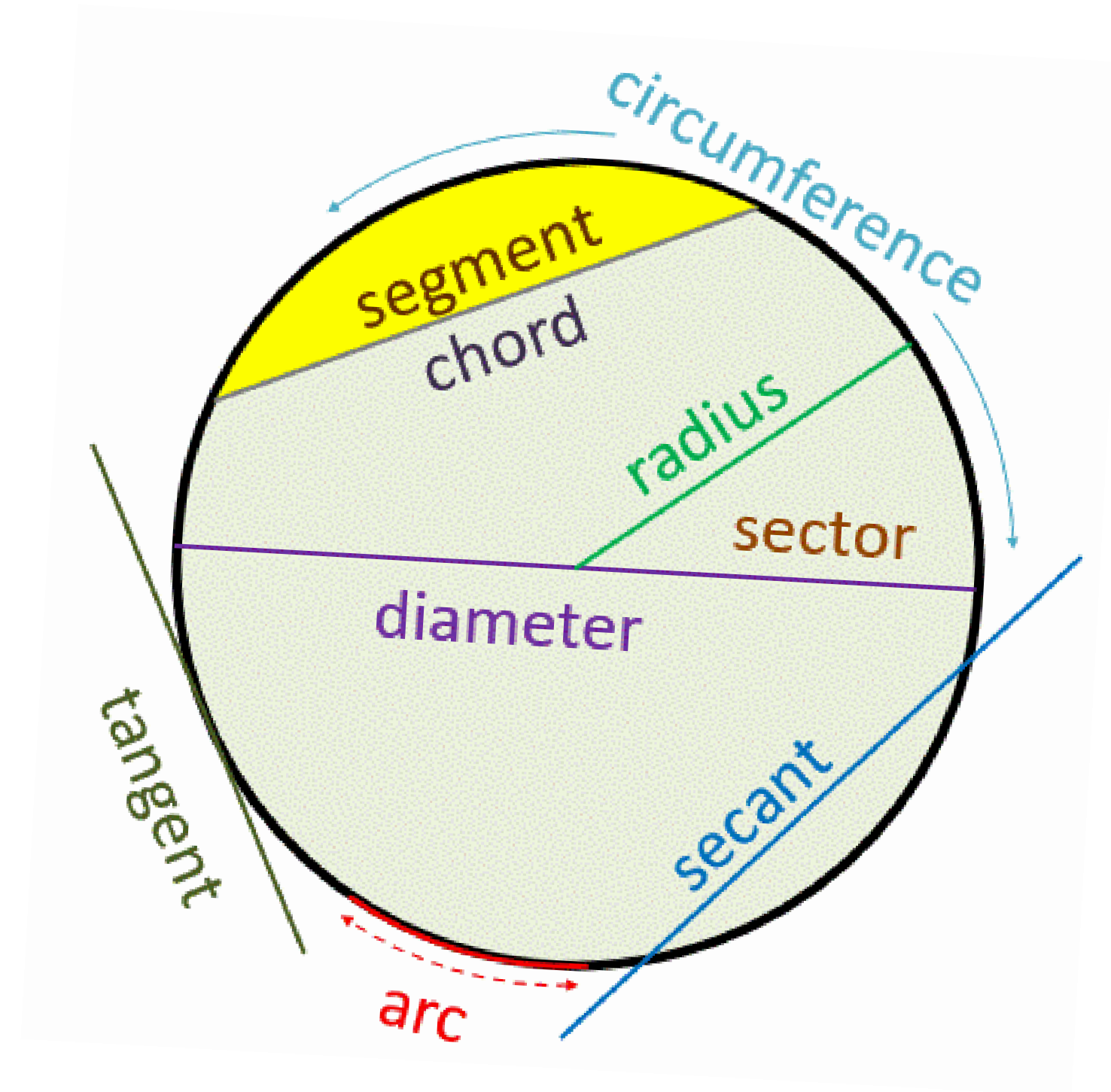
Try it out!

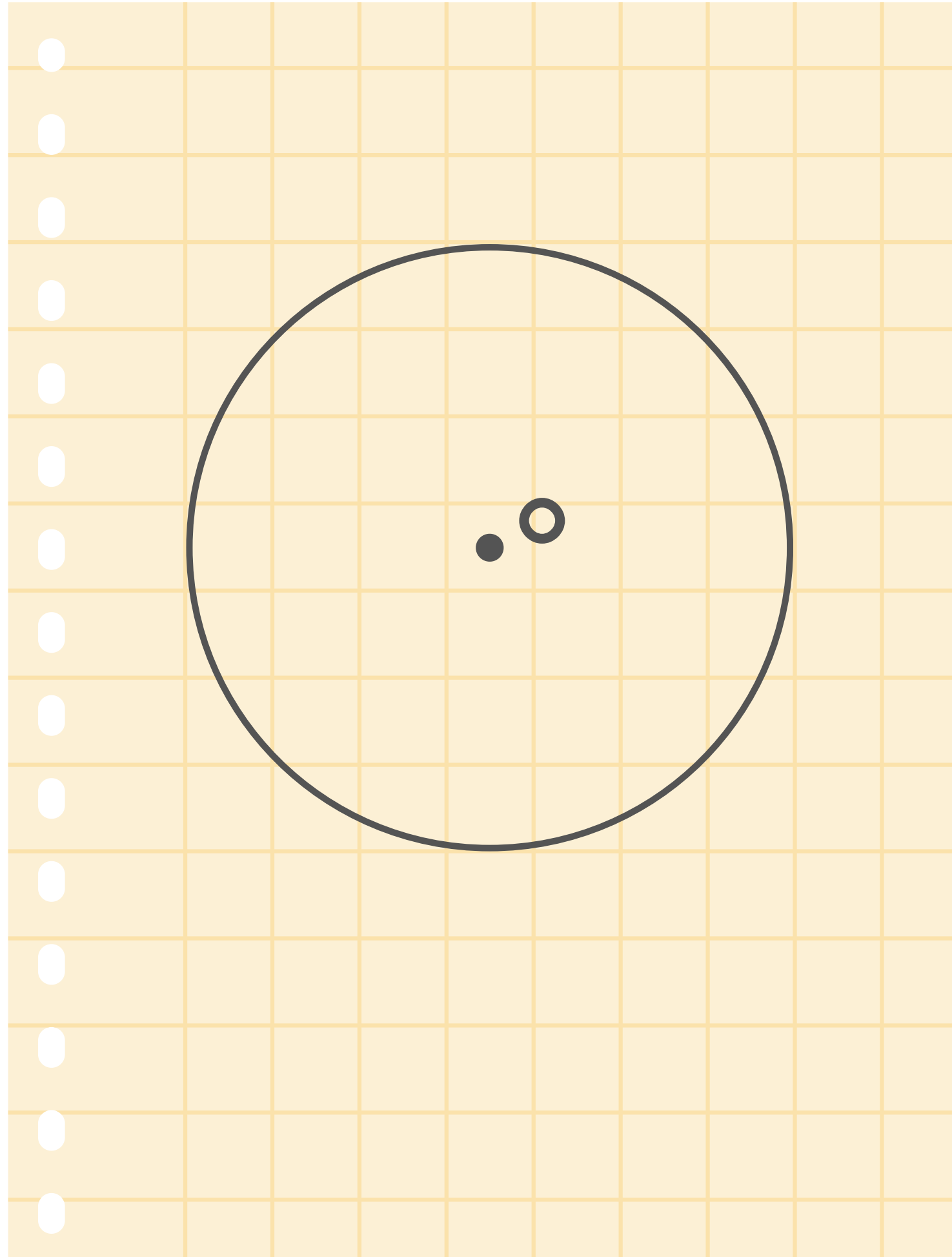
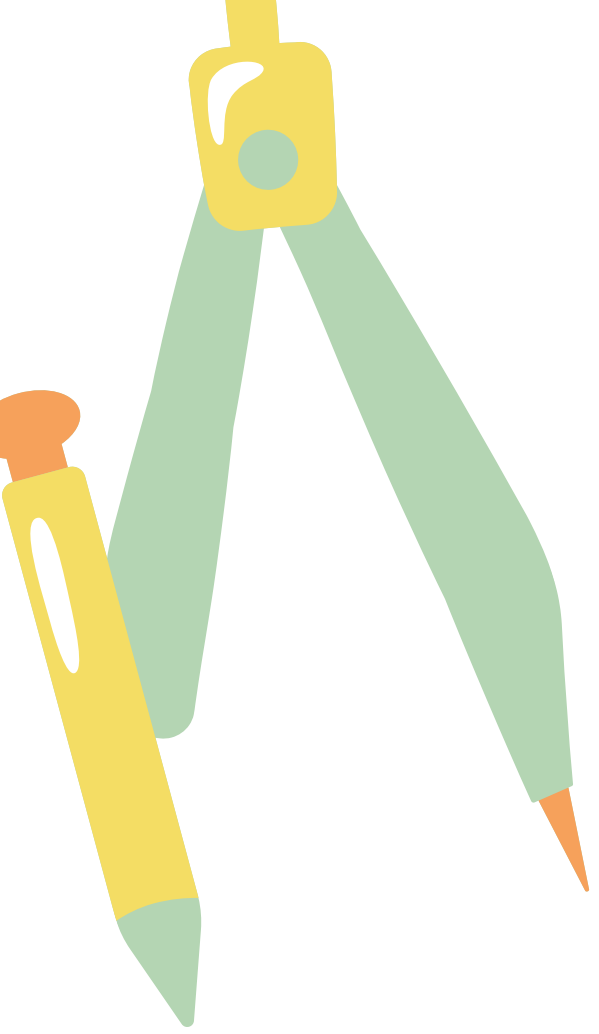


# $\pi$

Draw a circle on the other side of your paper about this big.

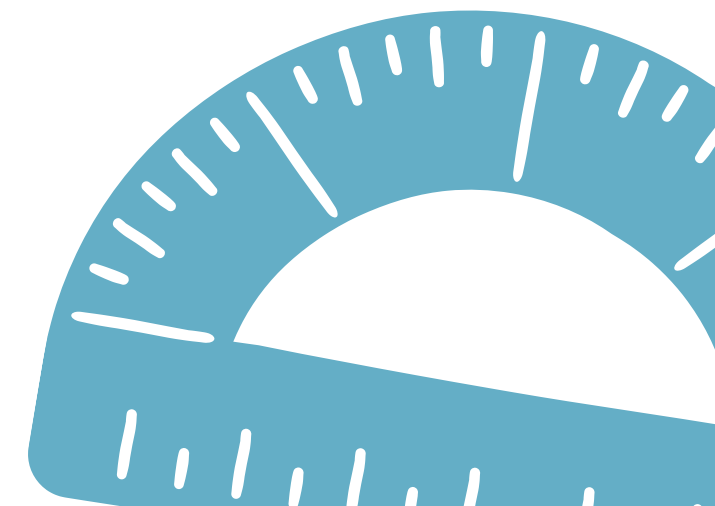
Don't label it just yet!

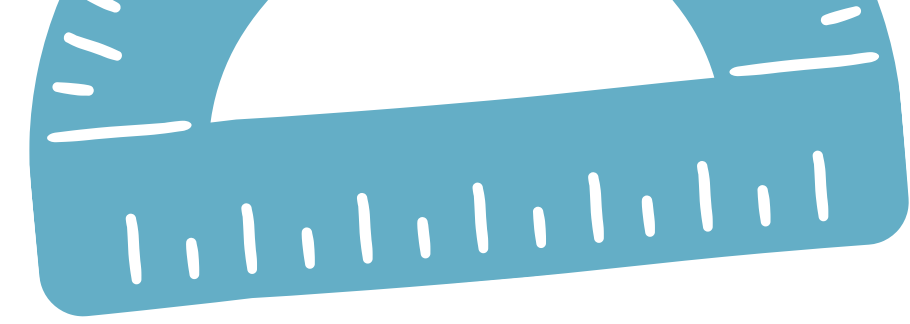




# Circle

A closed curve where all points on the curve are the same distance from the centre (O)

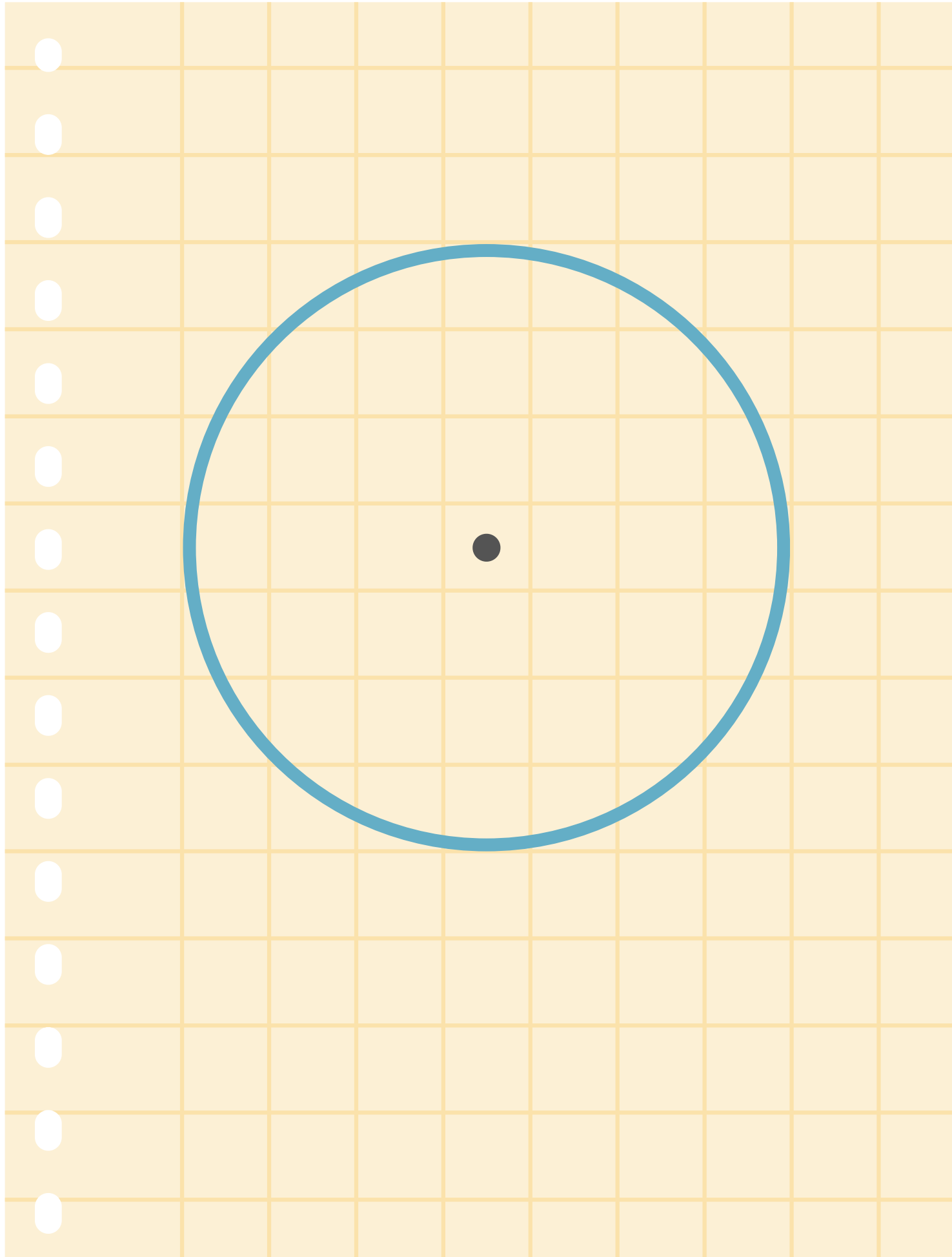
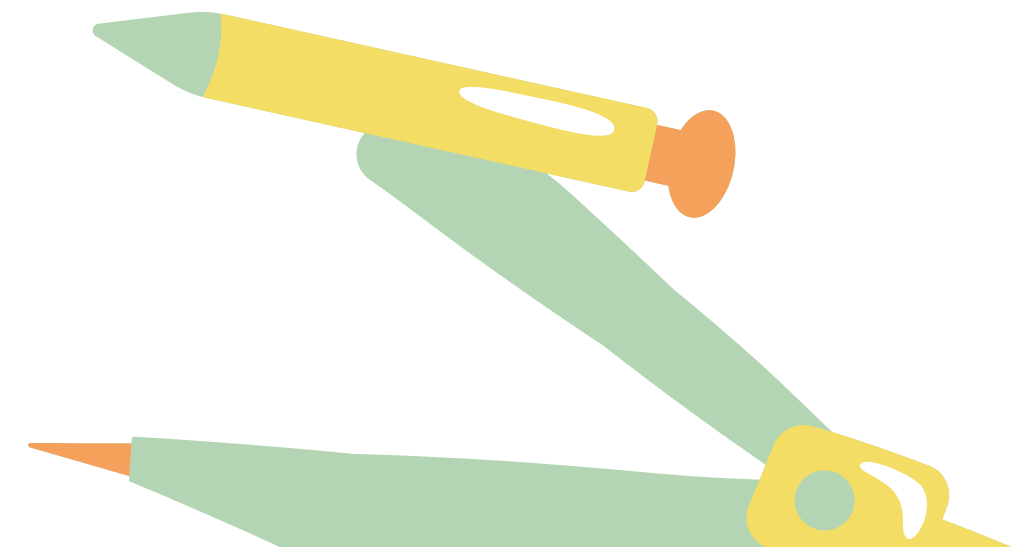


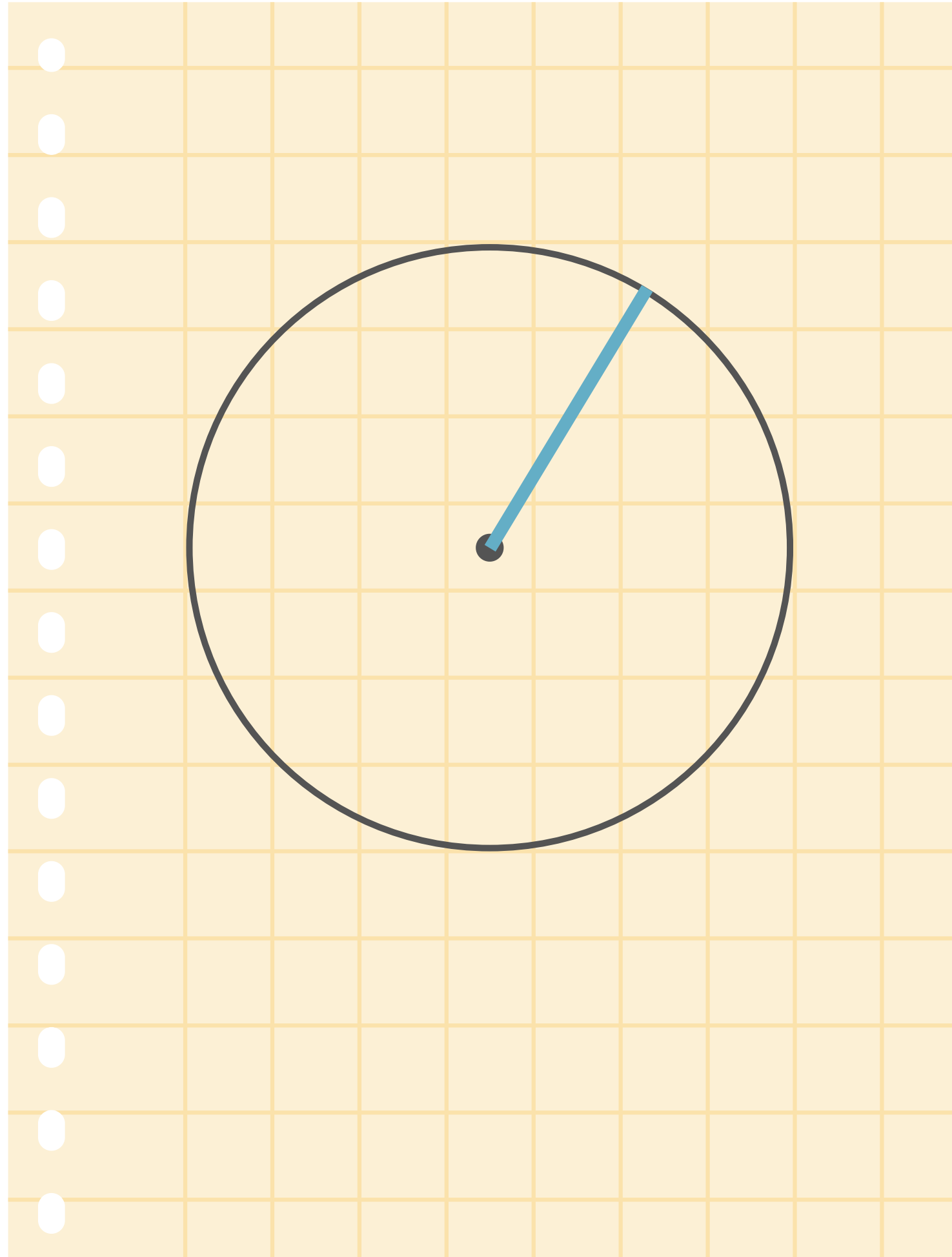
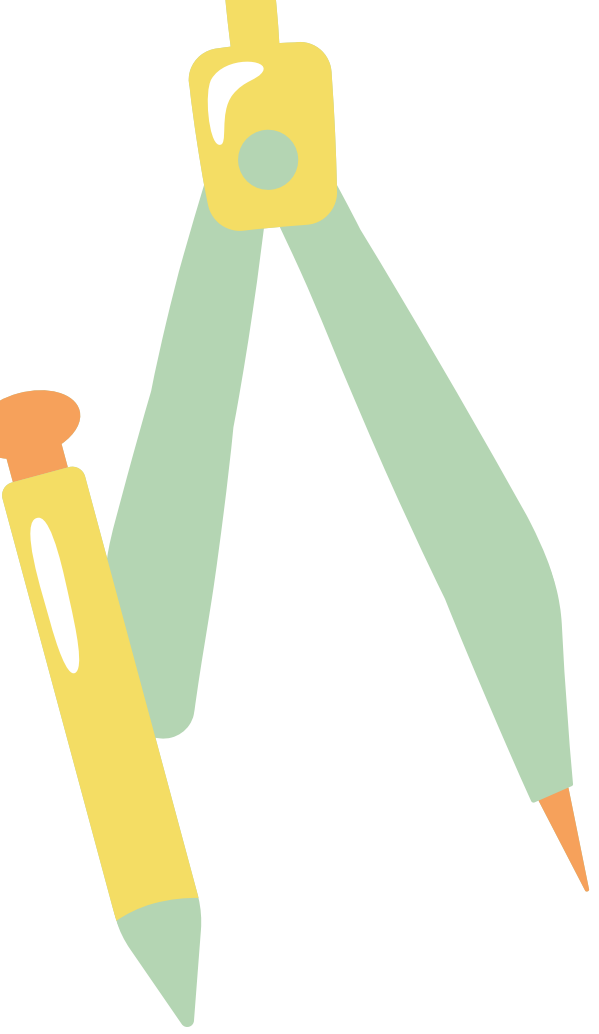


# Circumference

The perimeter of a circle

(also known as  $C$ )

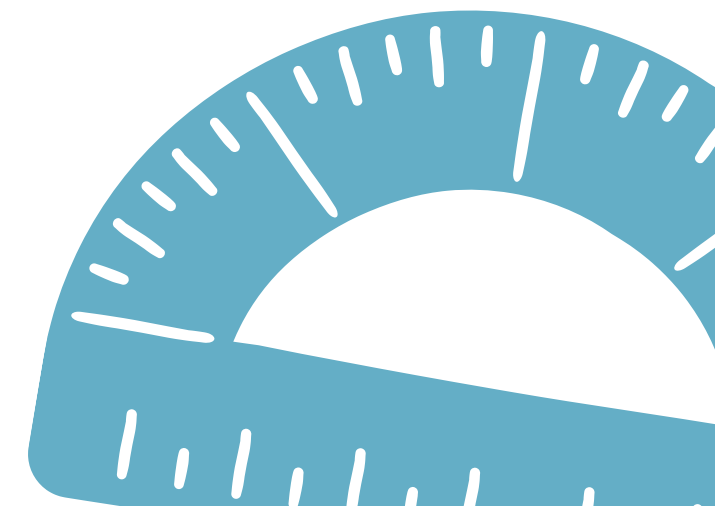


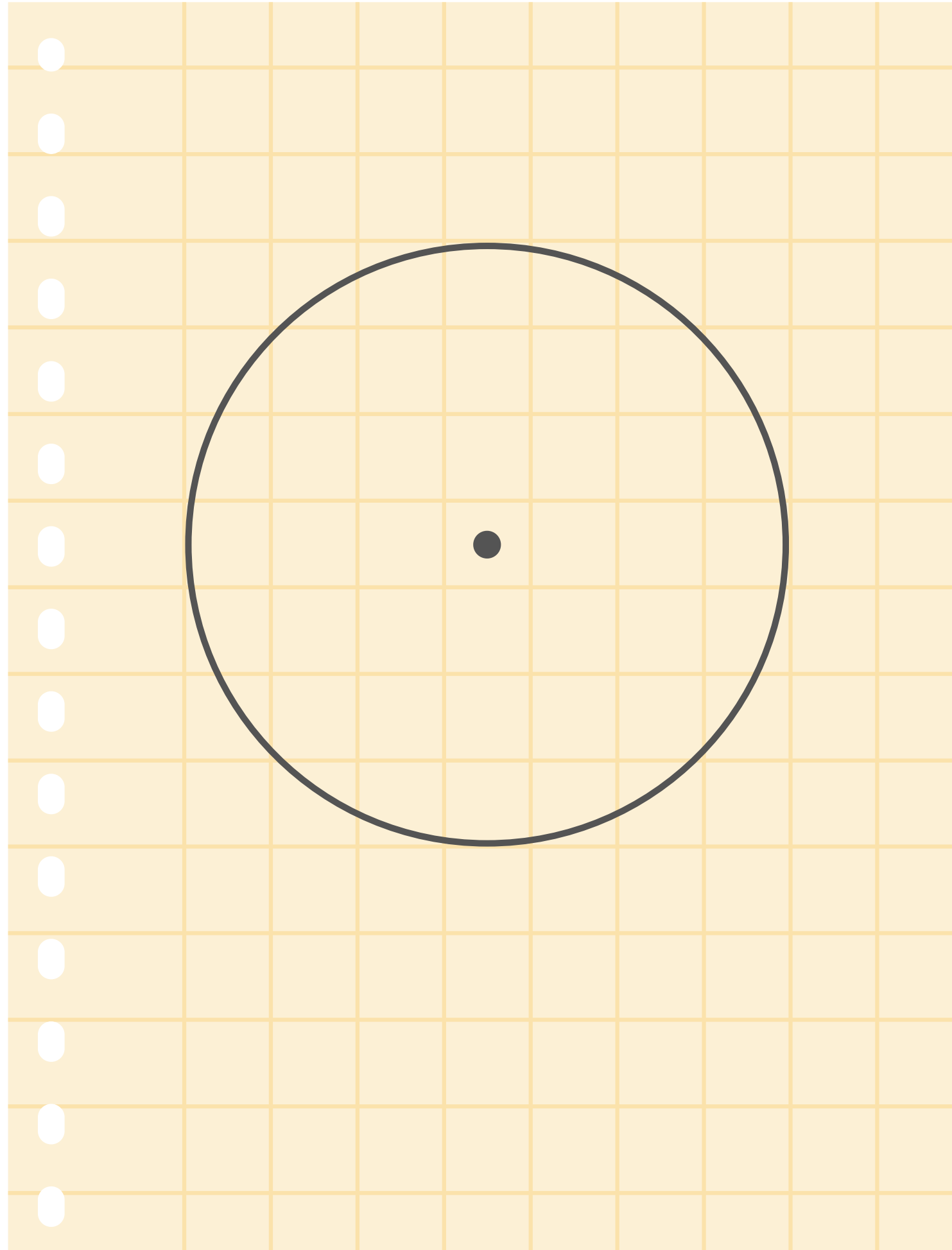
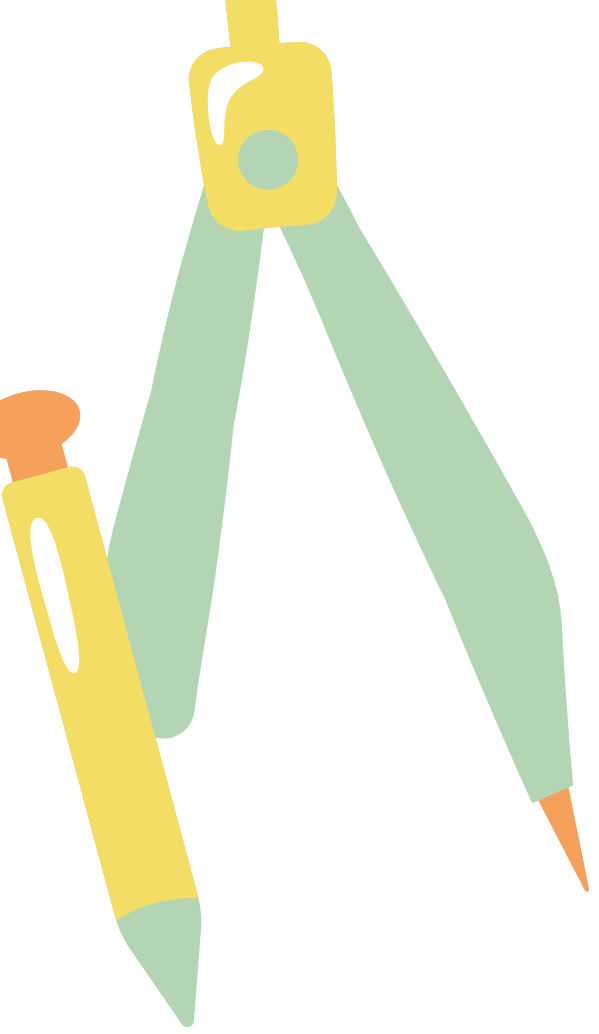


# Radius

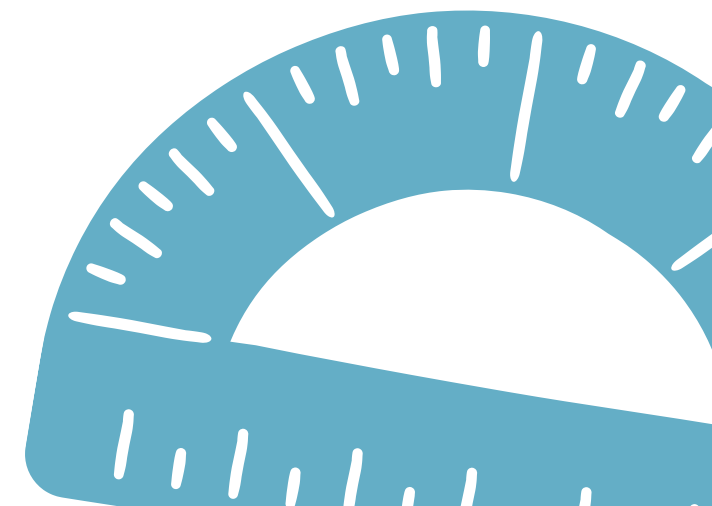
The straight-line **distance** from the centre to the edge of a circle

(also known as  $r$ )

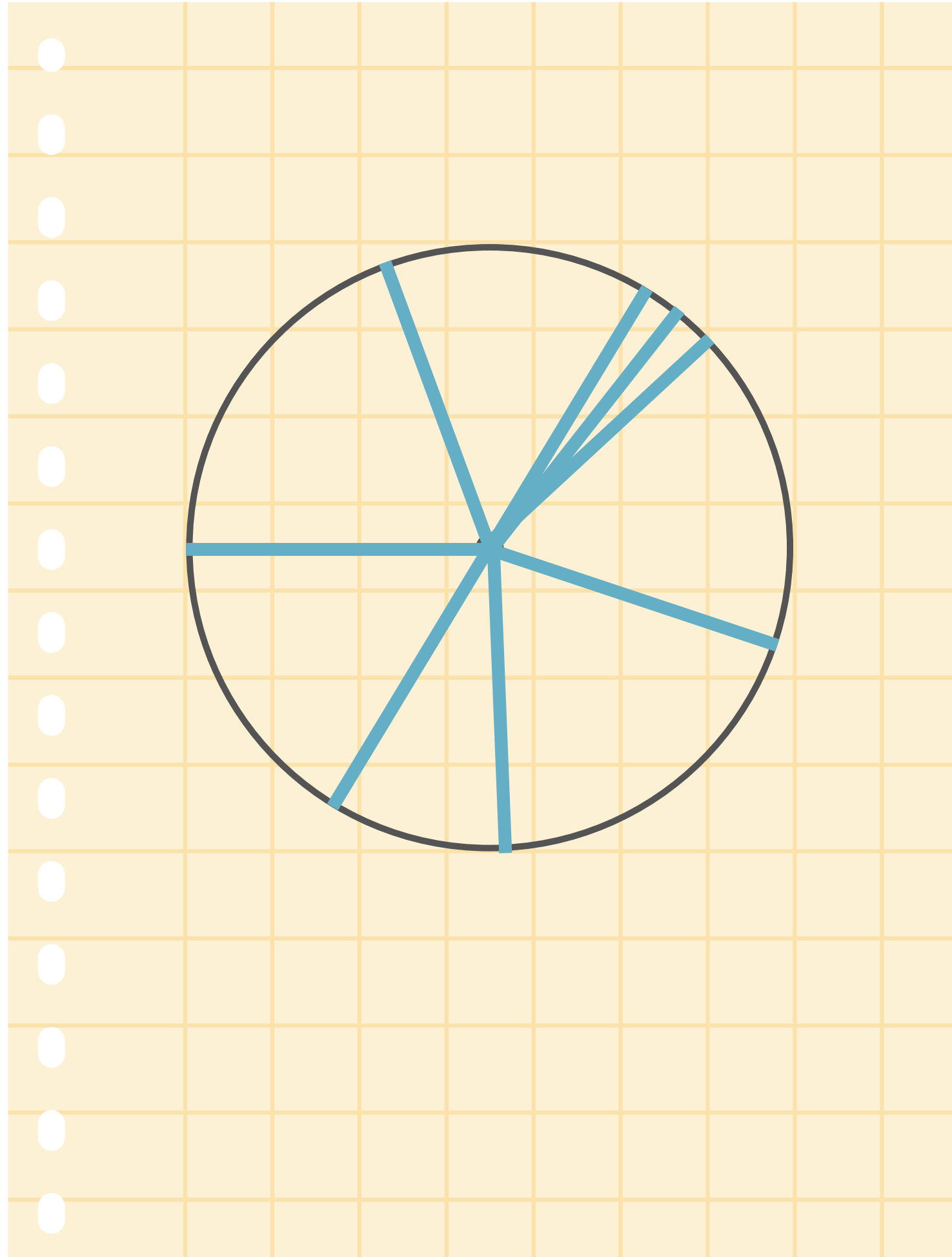
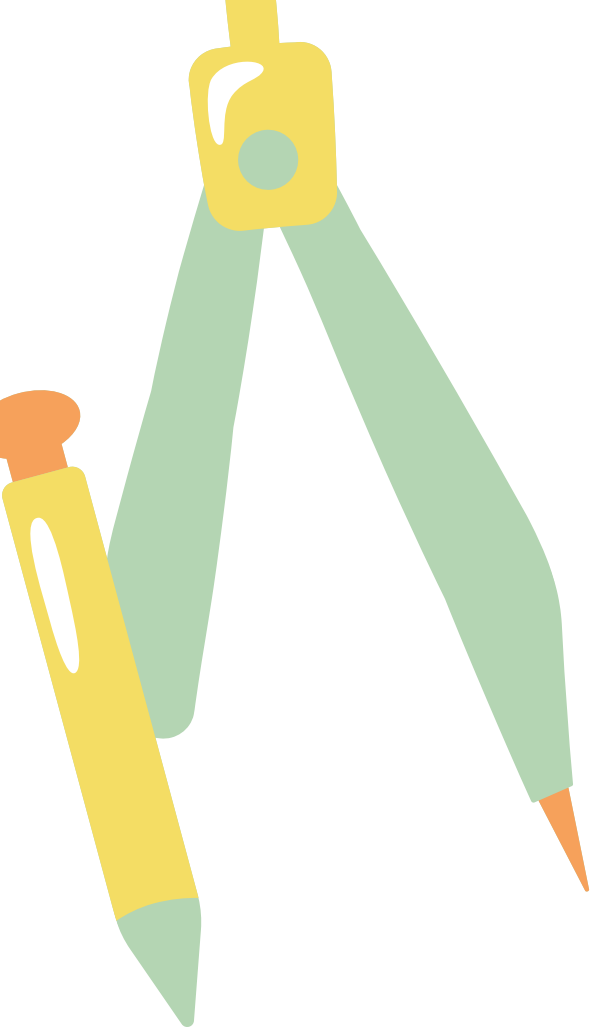




How many radii  
(plural of radius)  
does a circle have?



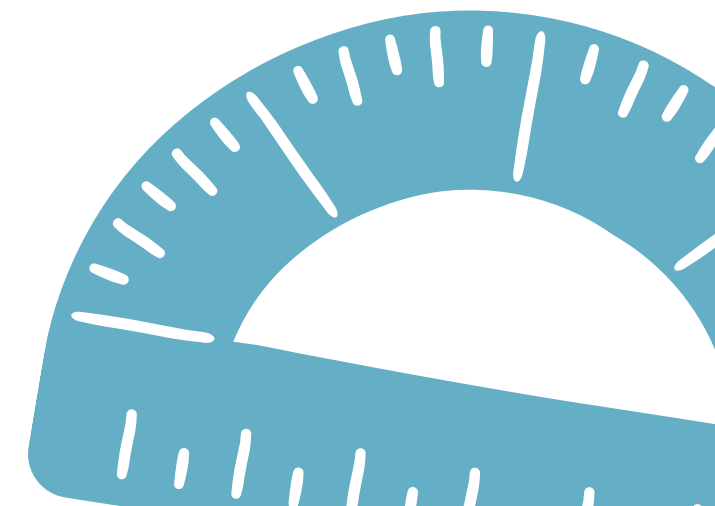


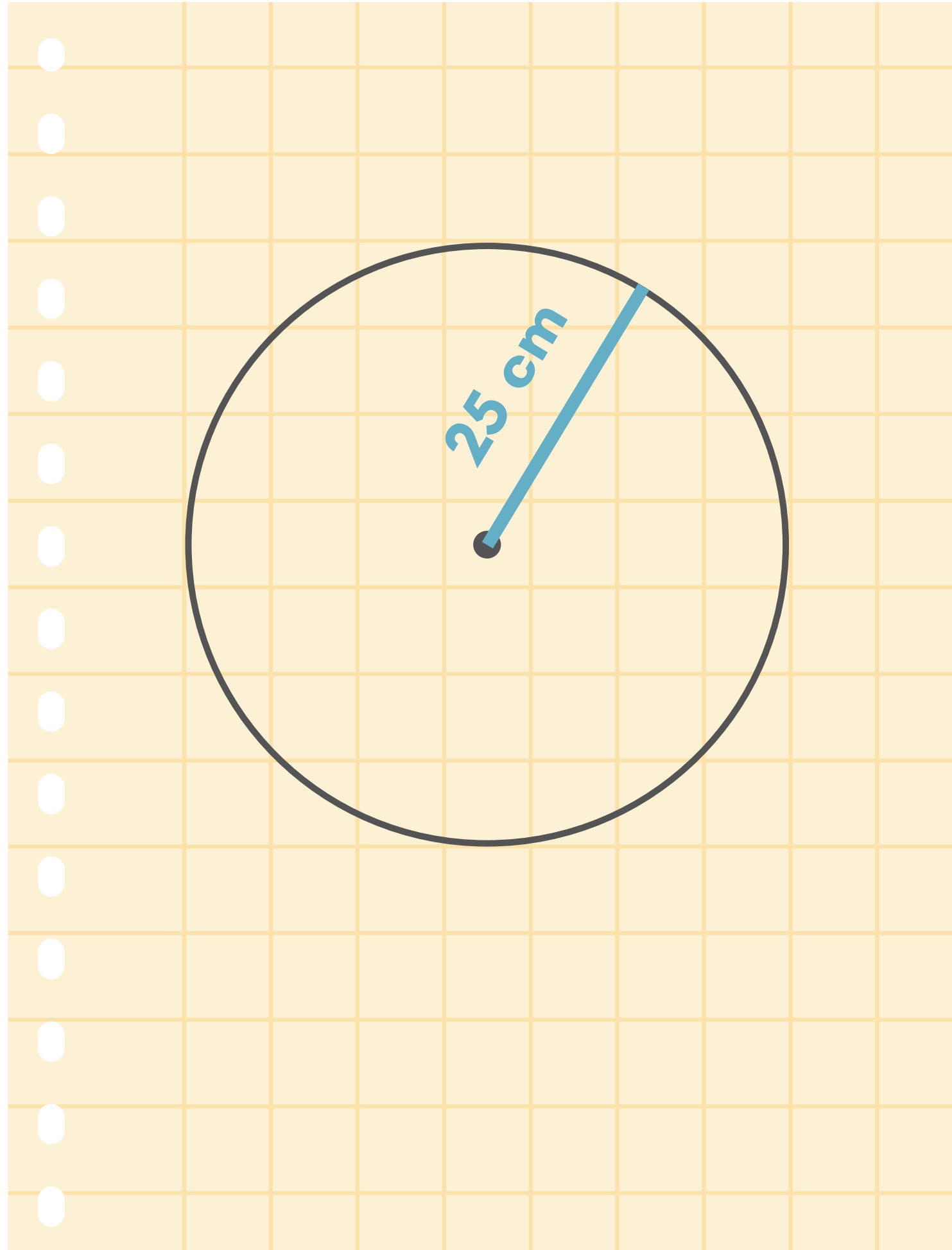
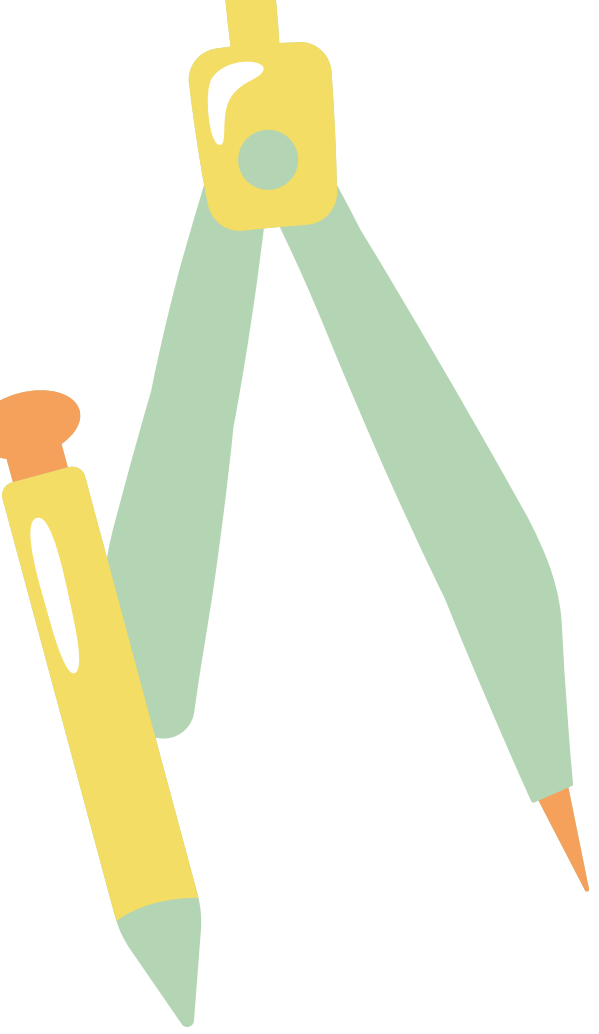


How many radii  
(plural of radius)  
does a circle have?

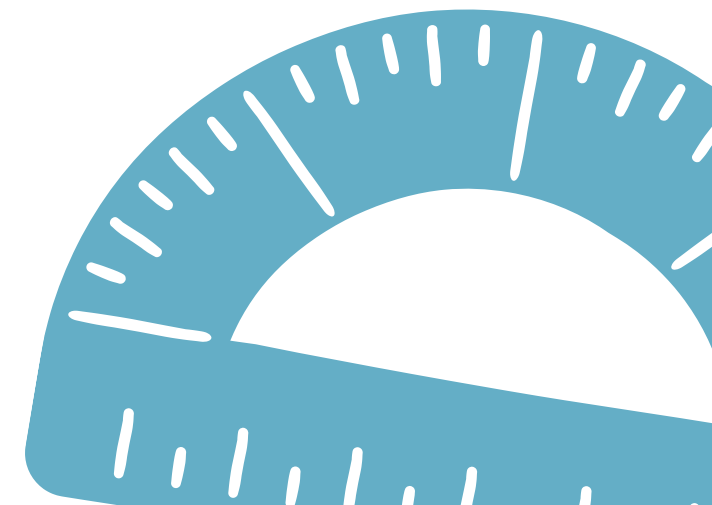
**Infinity!**

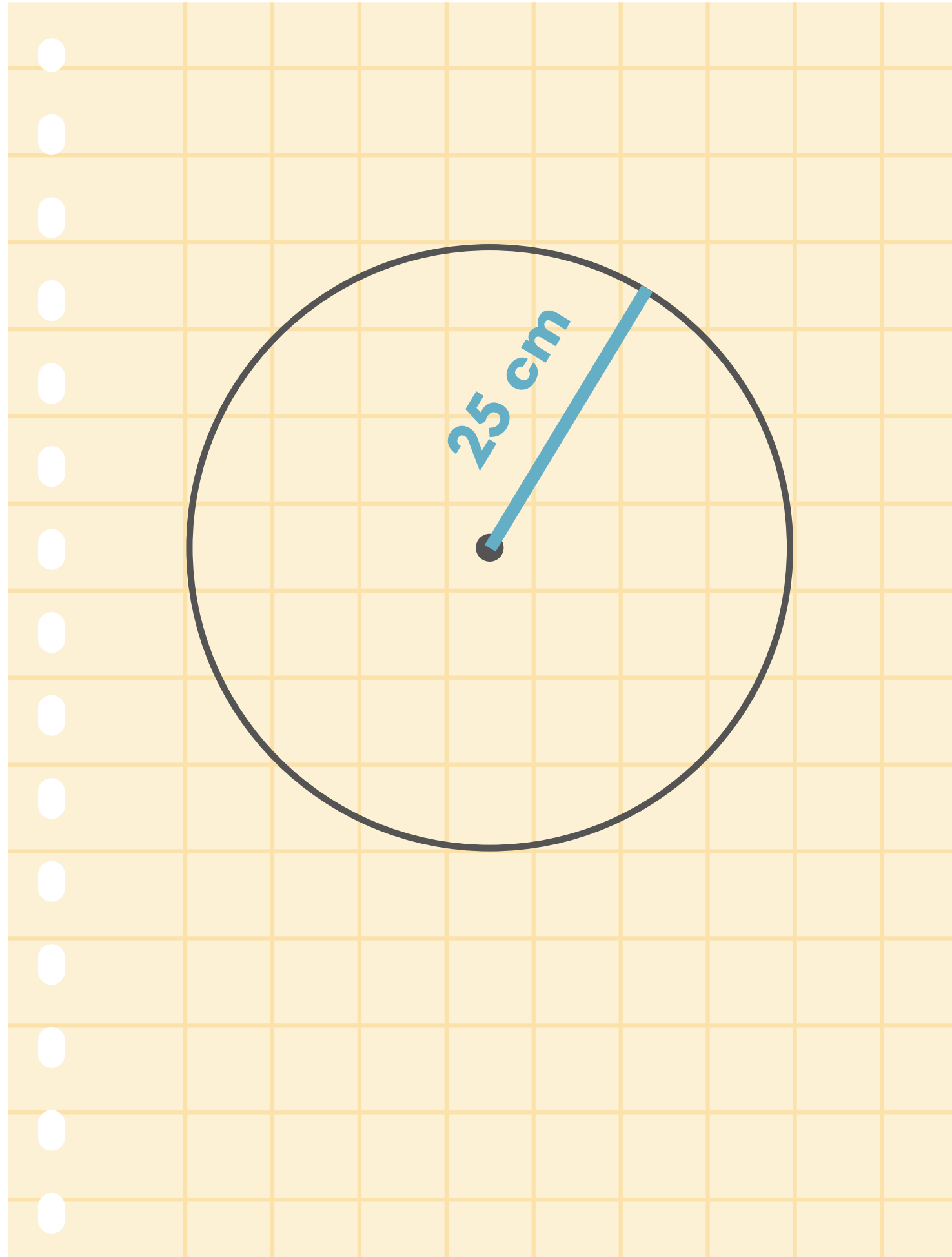
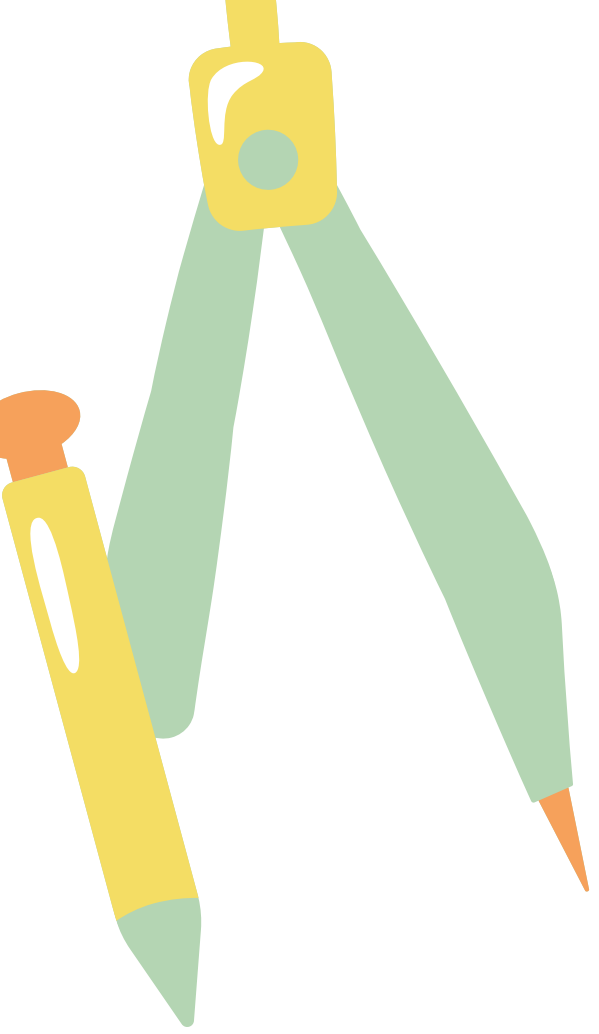
**All radii are  
equal in length**





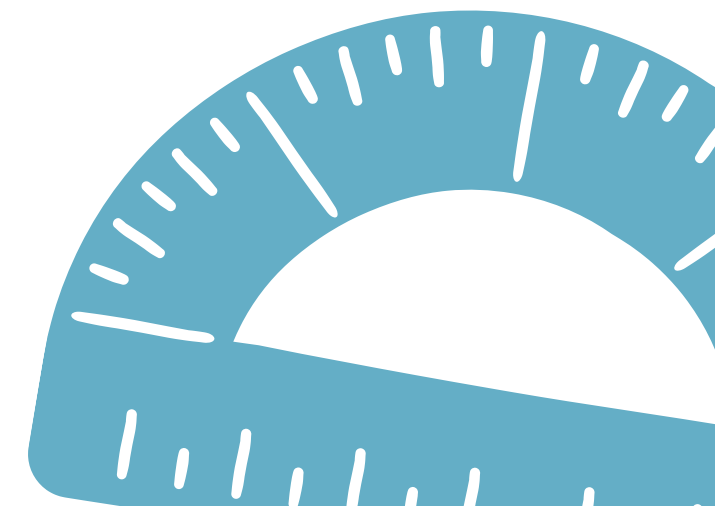
What is the radius of this circle?

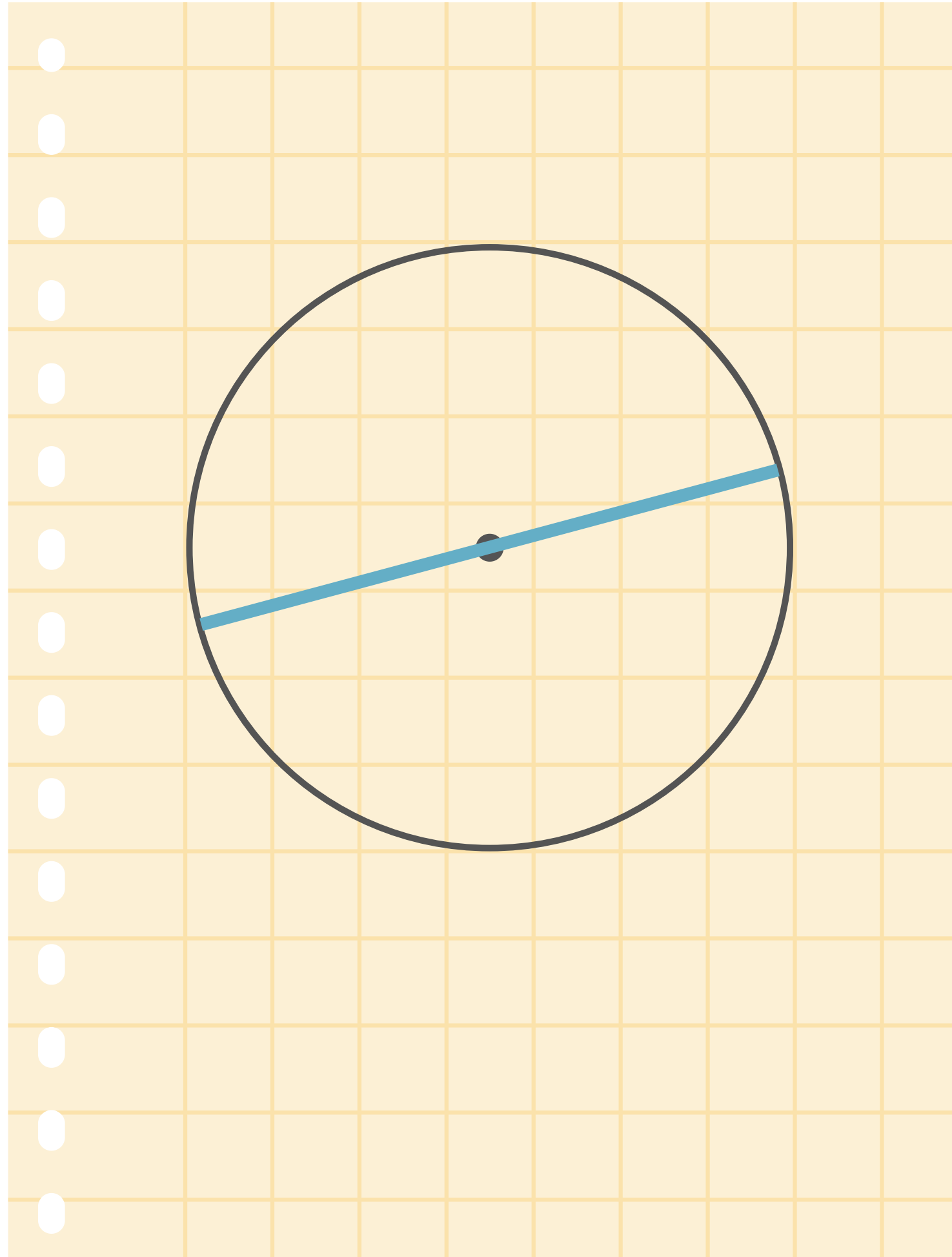
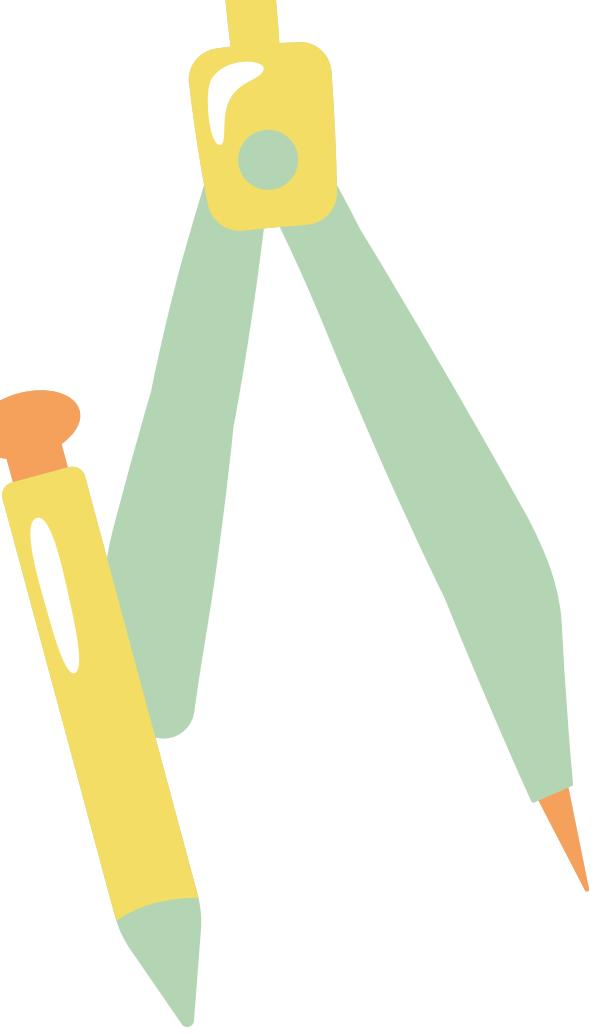




What is the radius of this circle?

**25 cm**

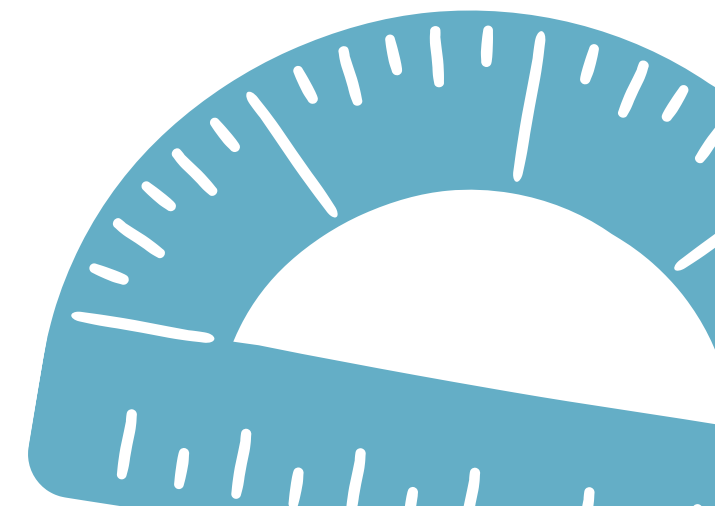


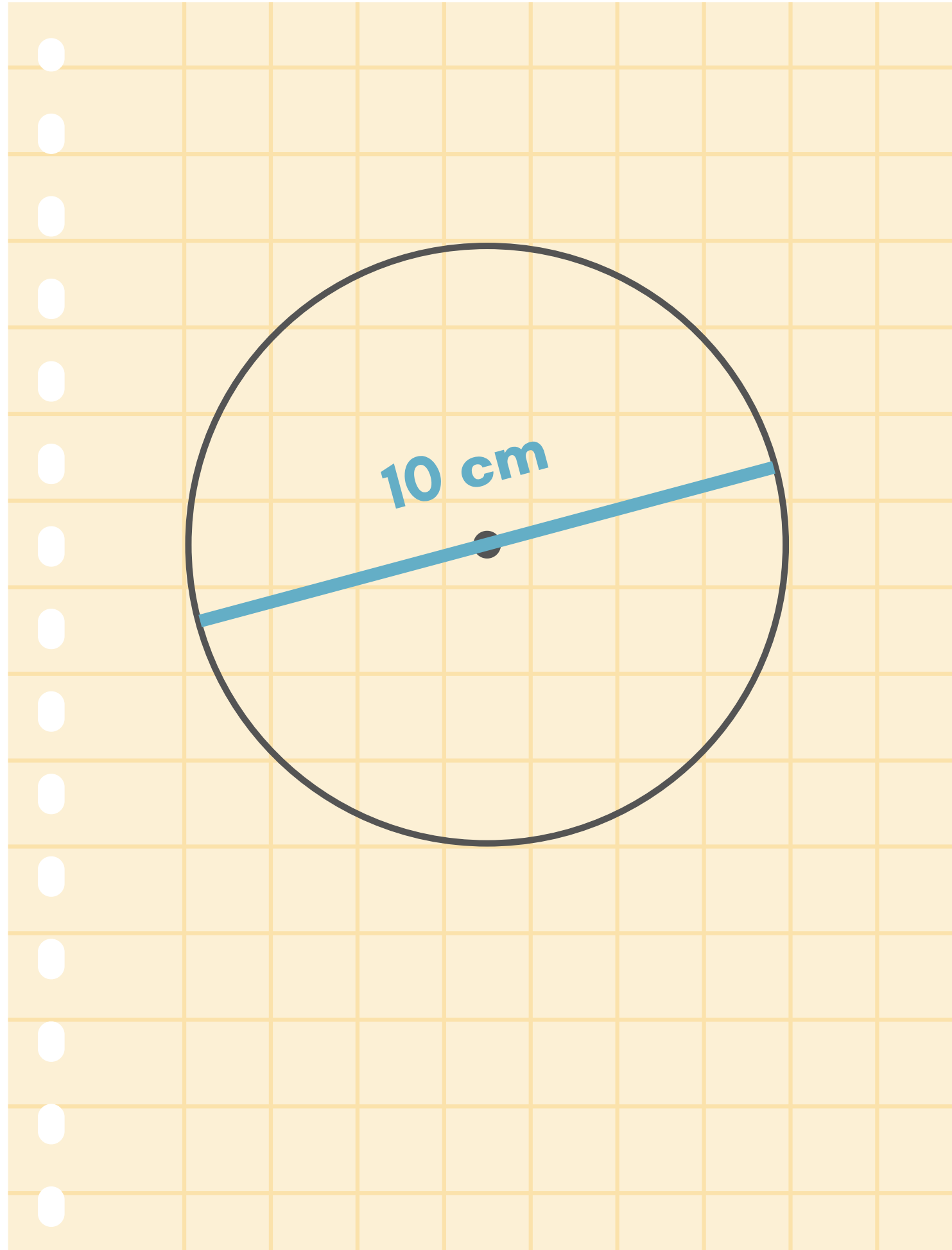
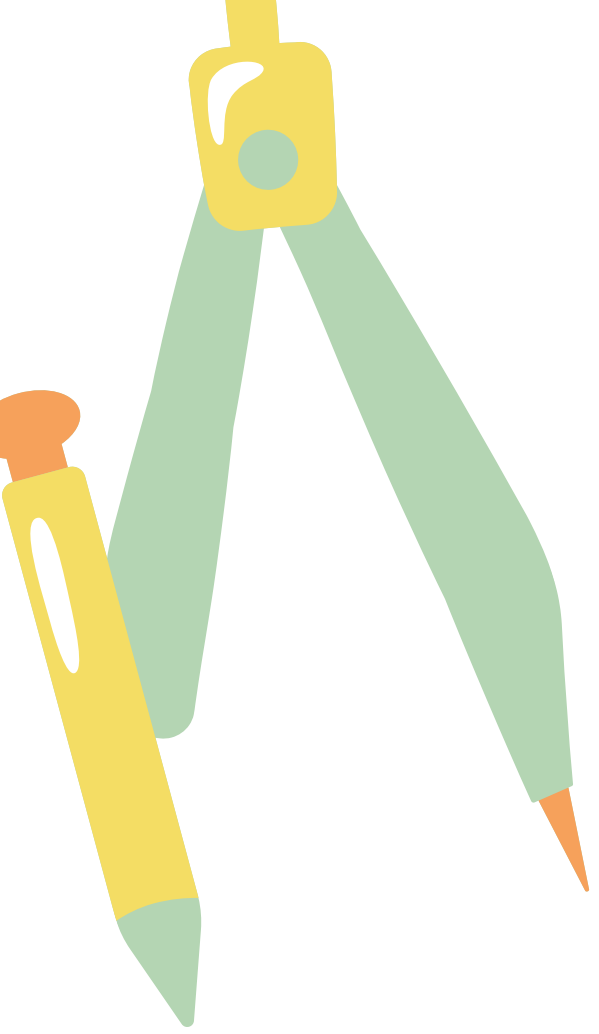


# Diameter

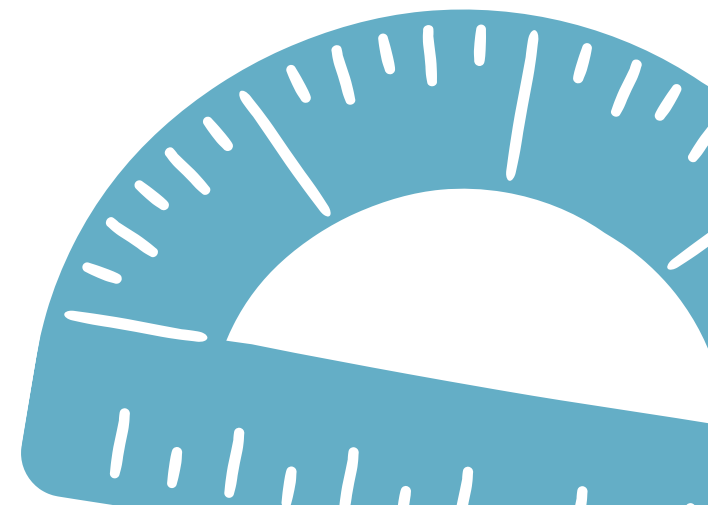
The straight-line **distance** from one side of a circle, through the centre, to the other

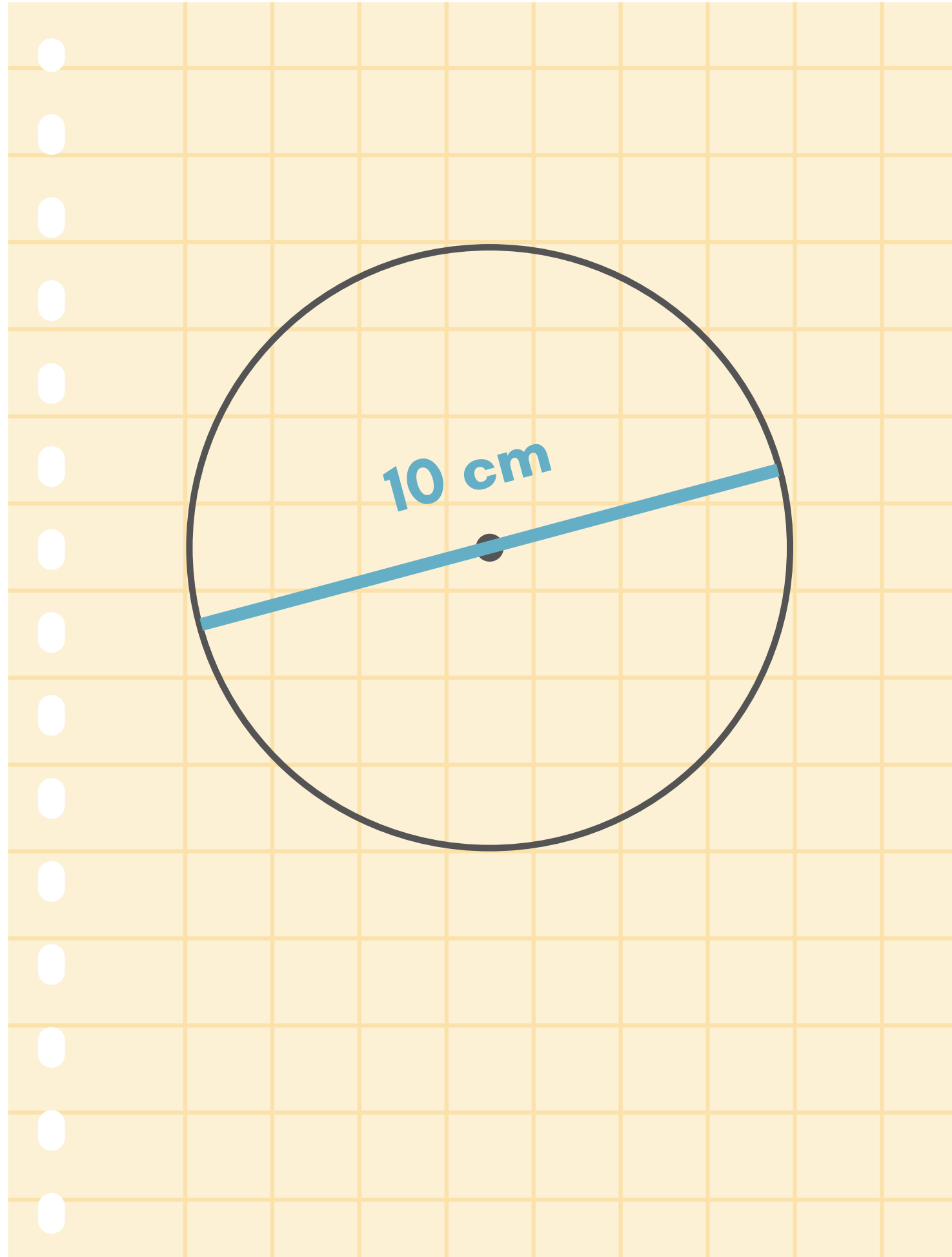
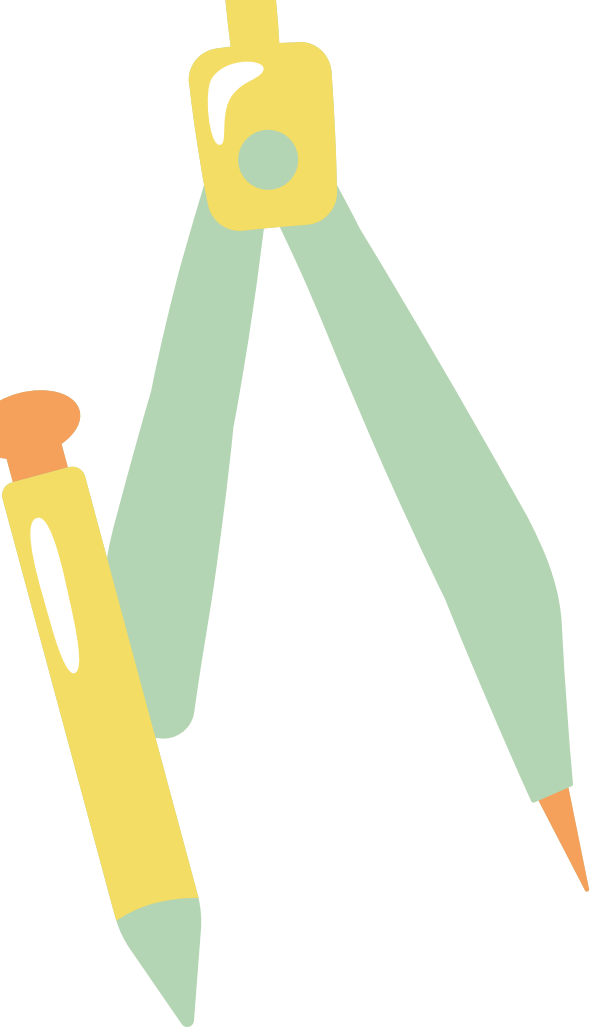
(also known as  $d$ )





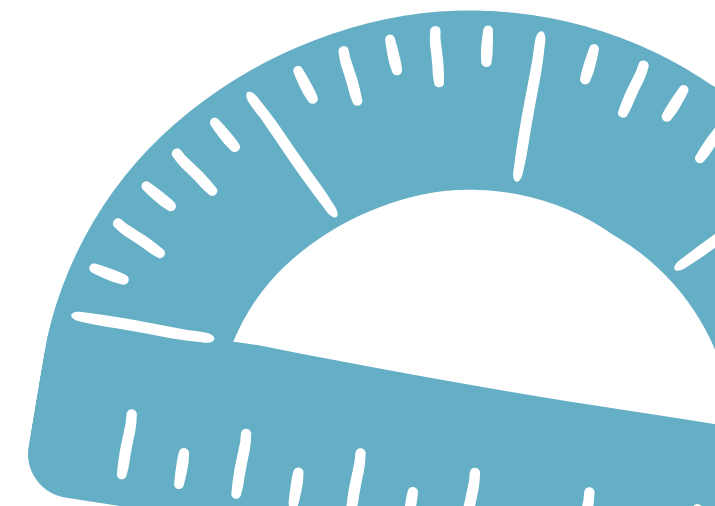
What is the diameter of this circle?

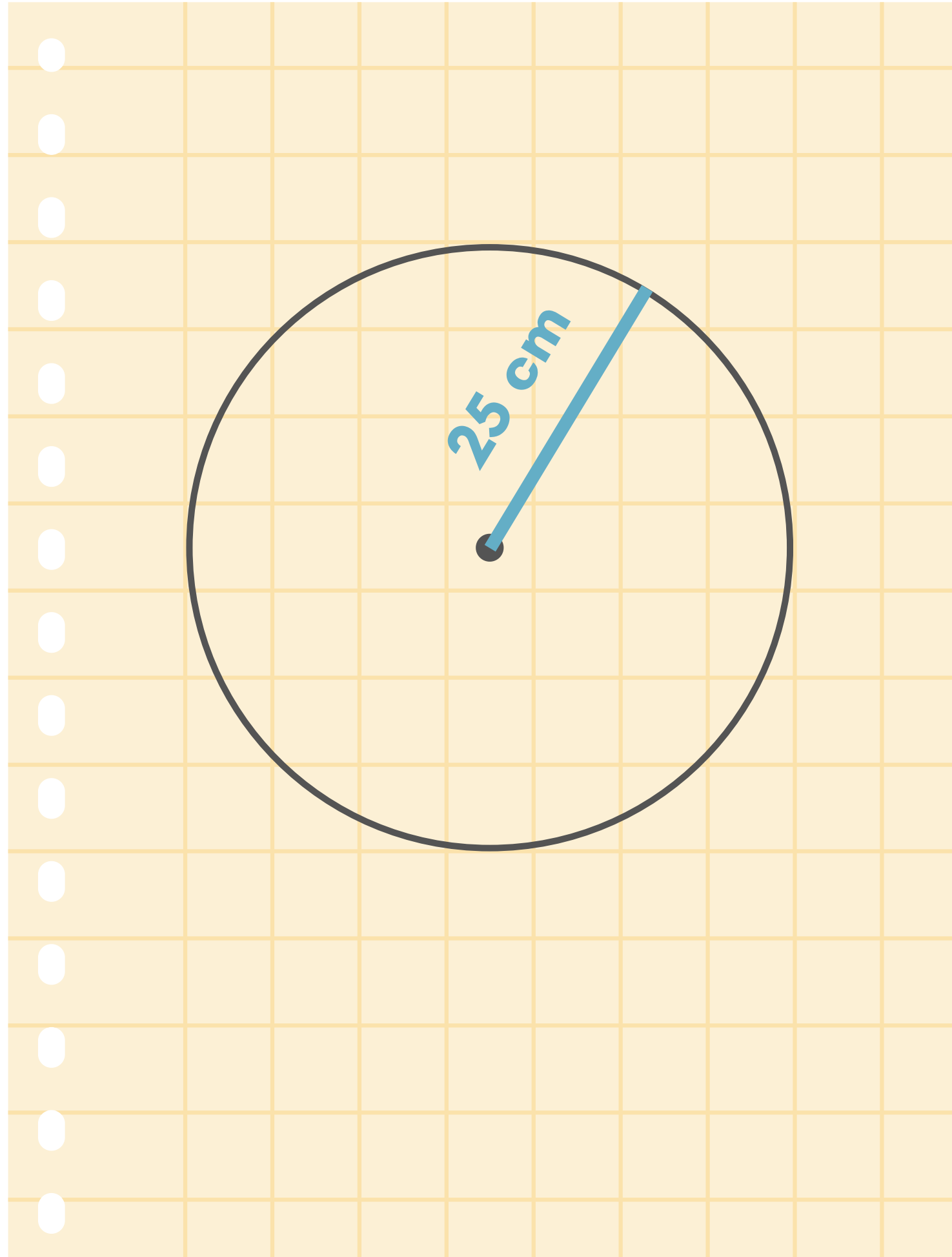
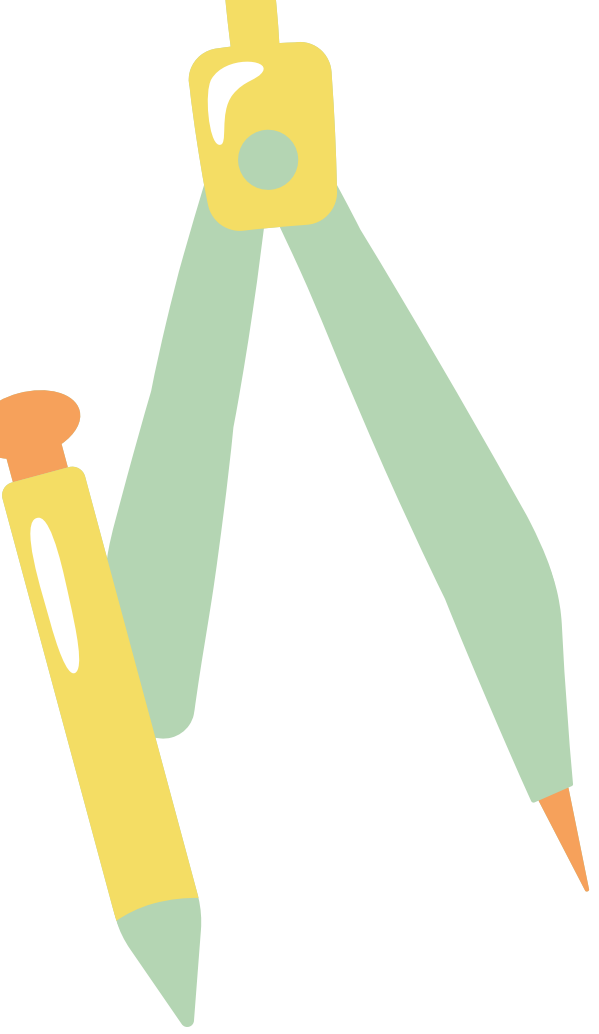




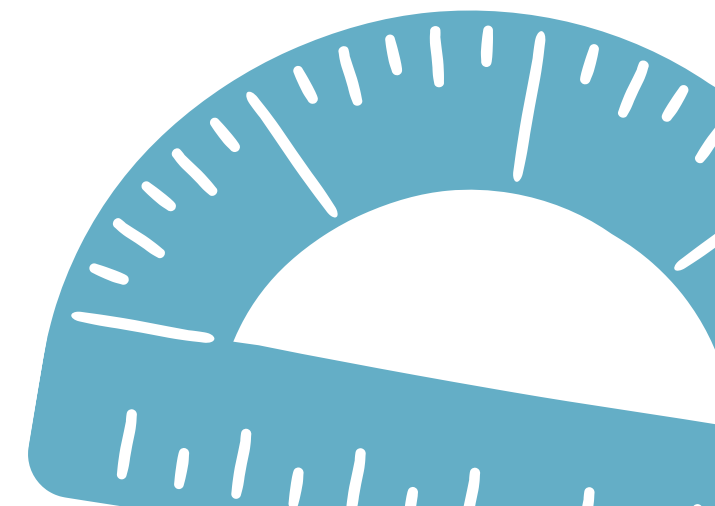
What is the diameter of this circle?

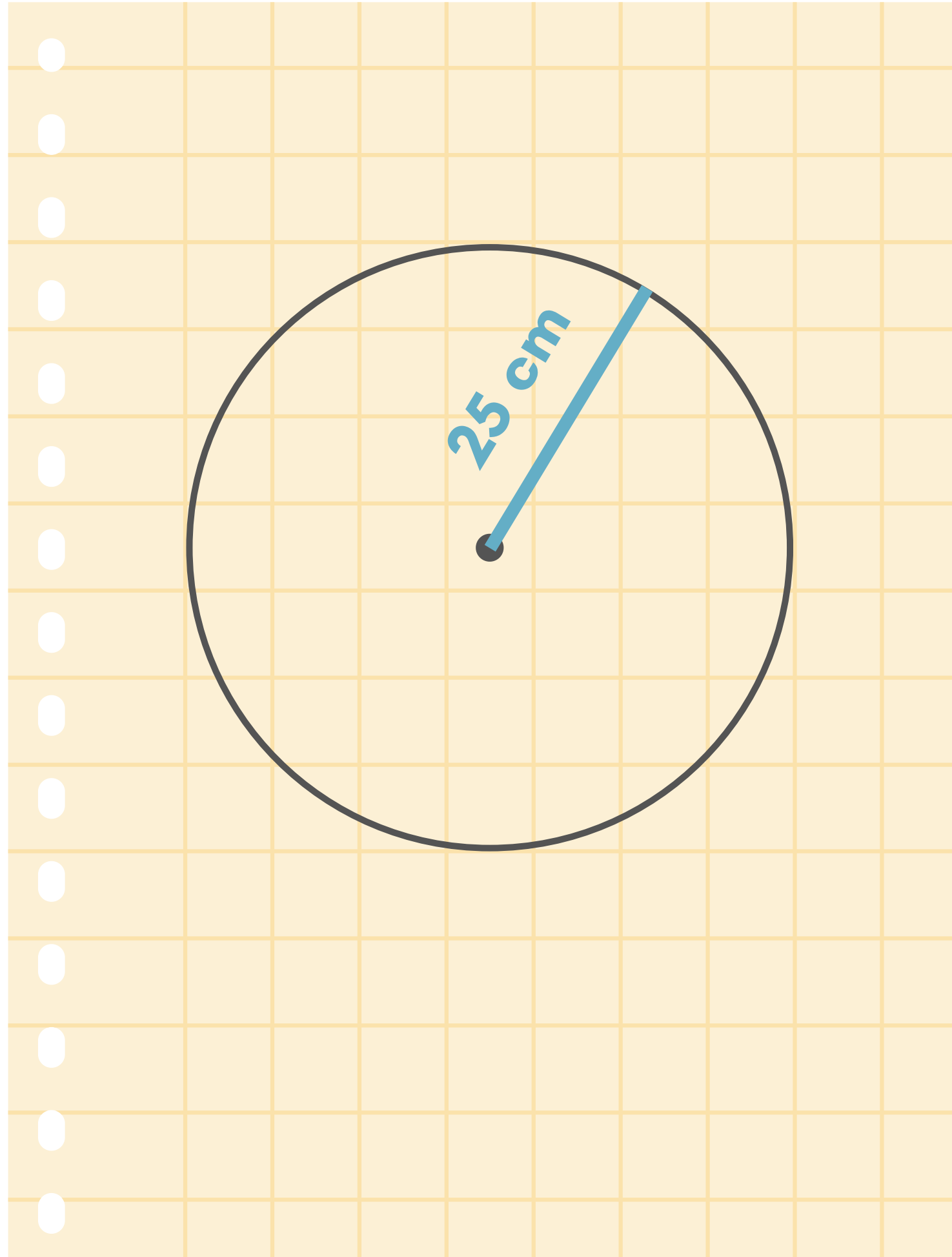
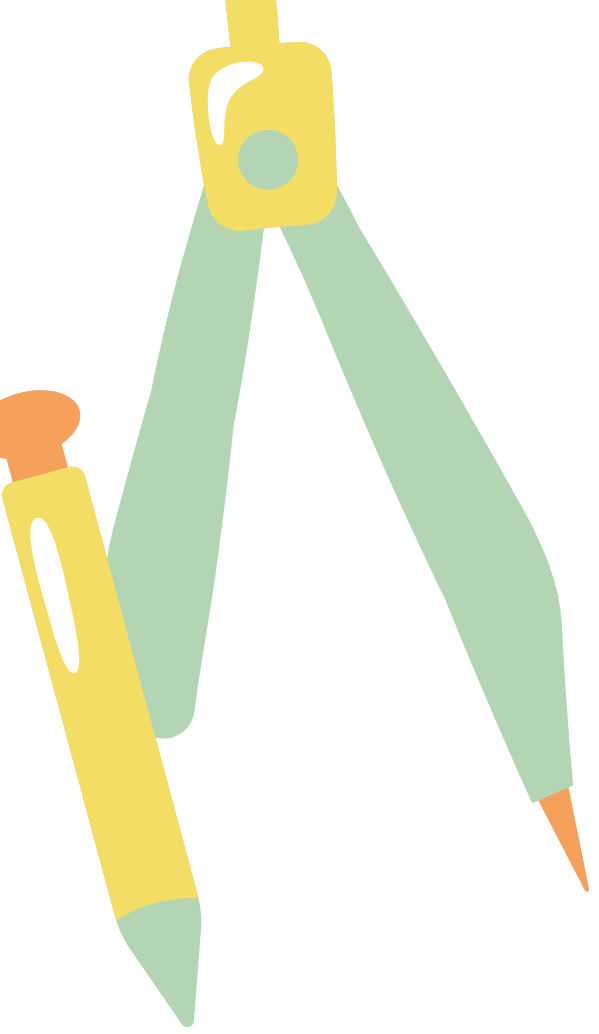
**10 cm**





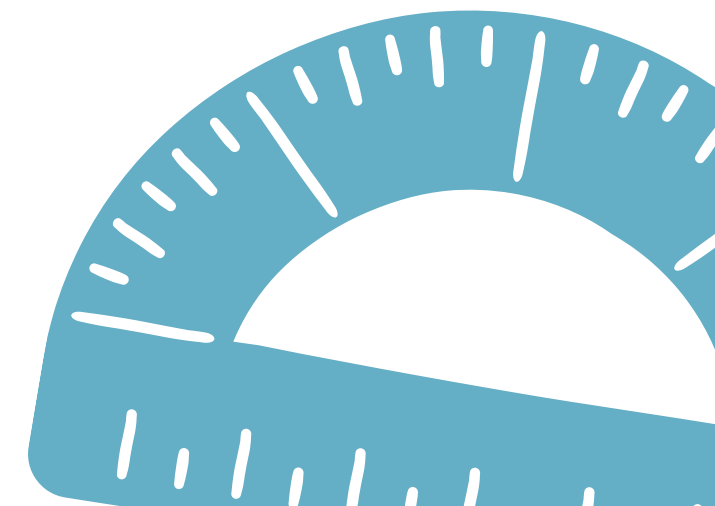
What is the diameter of this circle?



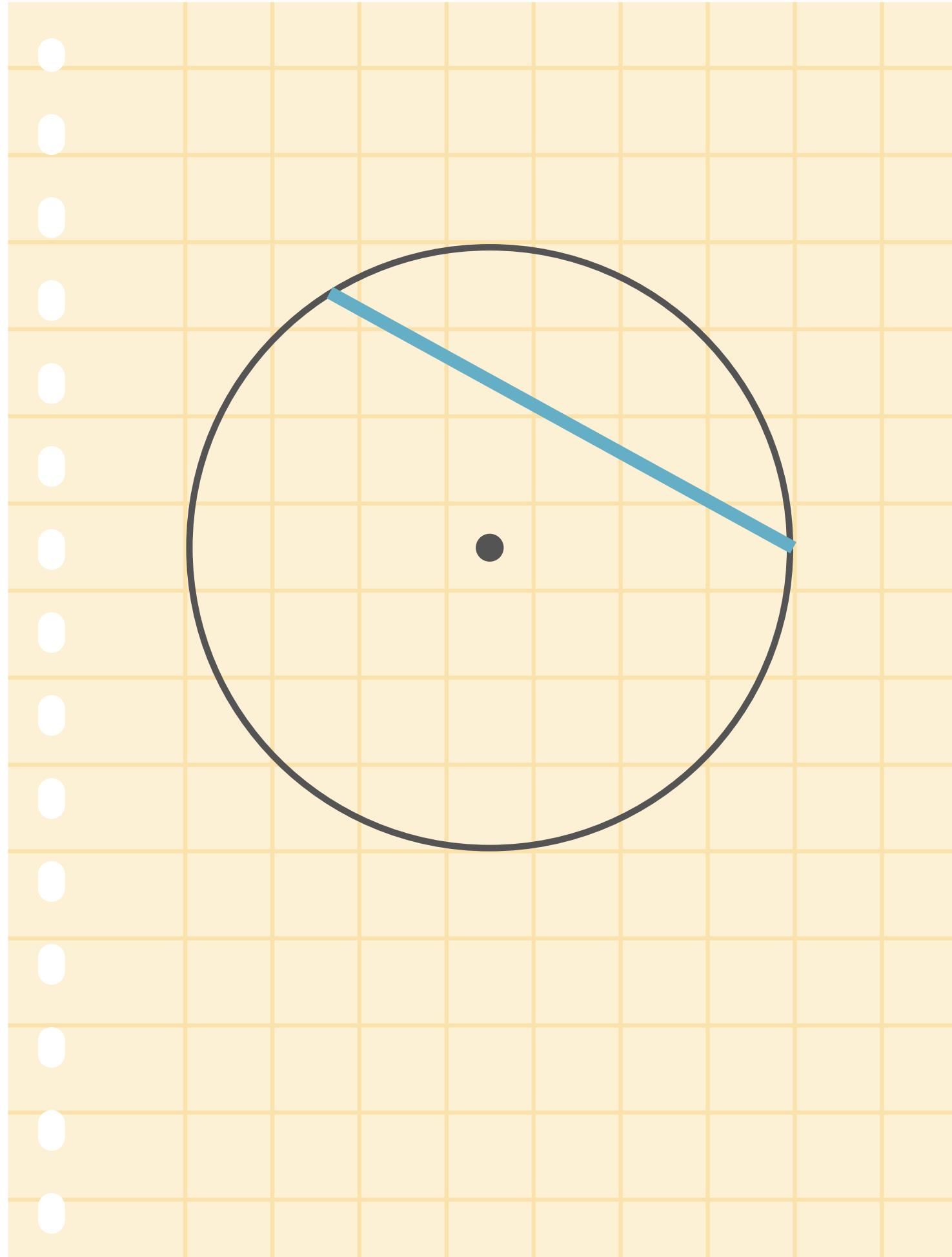
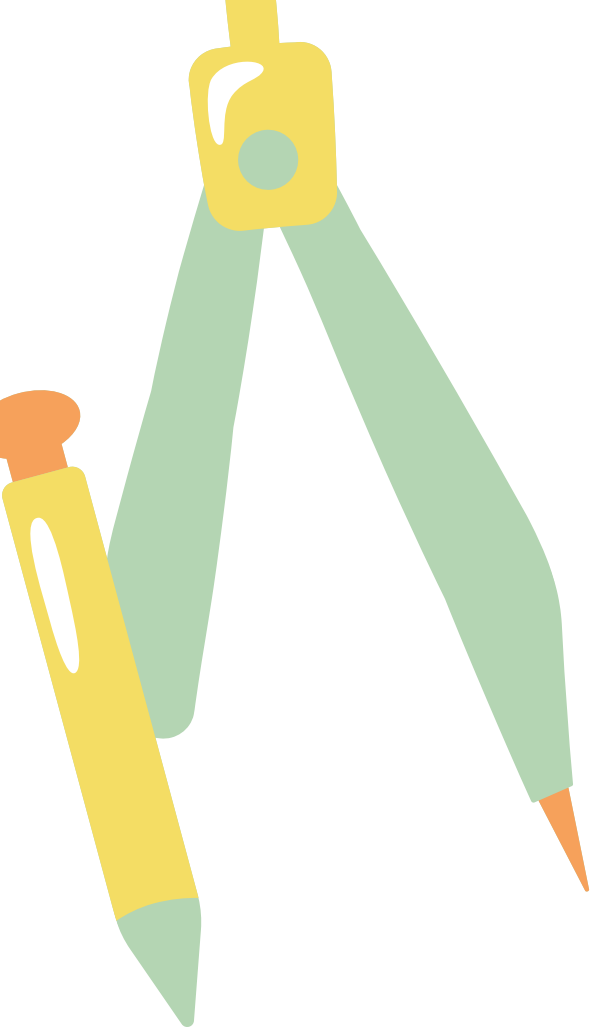


What is the diameter  
of this circle?

$$\begin{aligned}d &= 2r \\ &= 2(25 \text{ cm}) \\ &= 50 \text{ cm}\end{aligned}$$

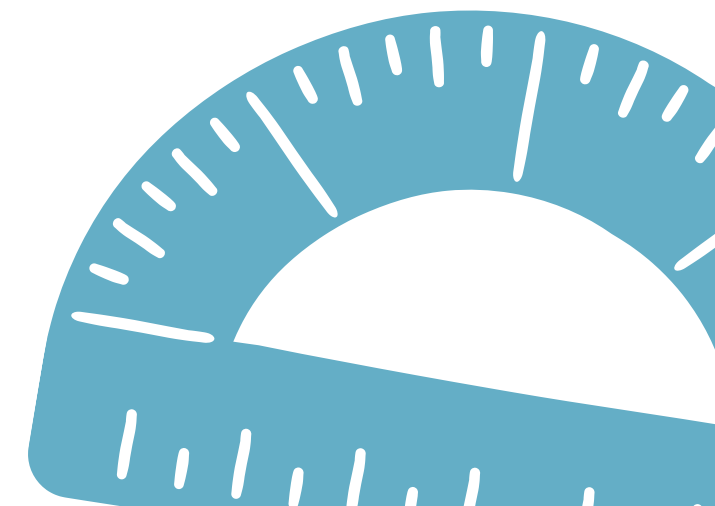


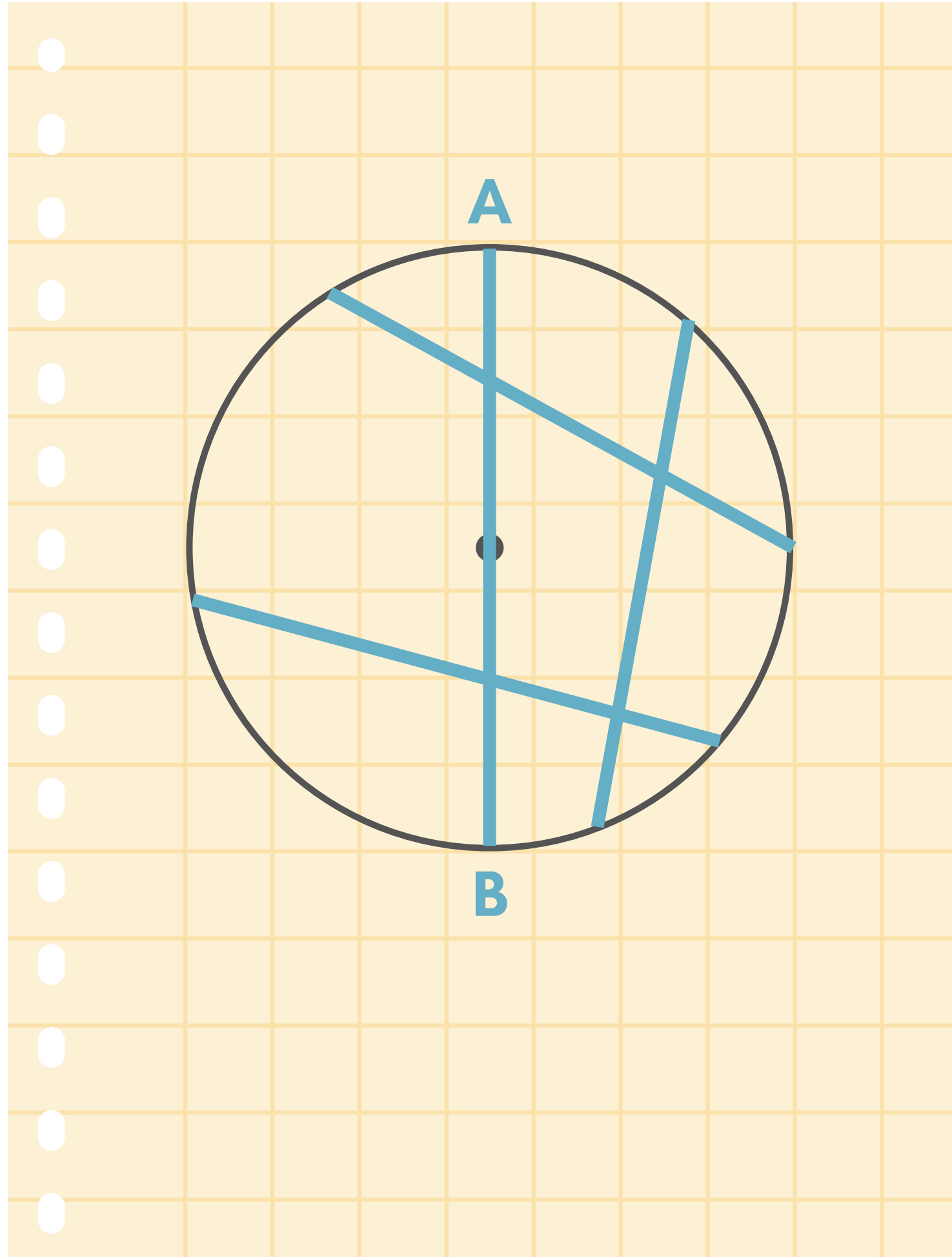
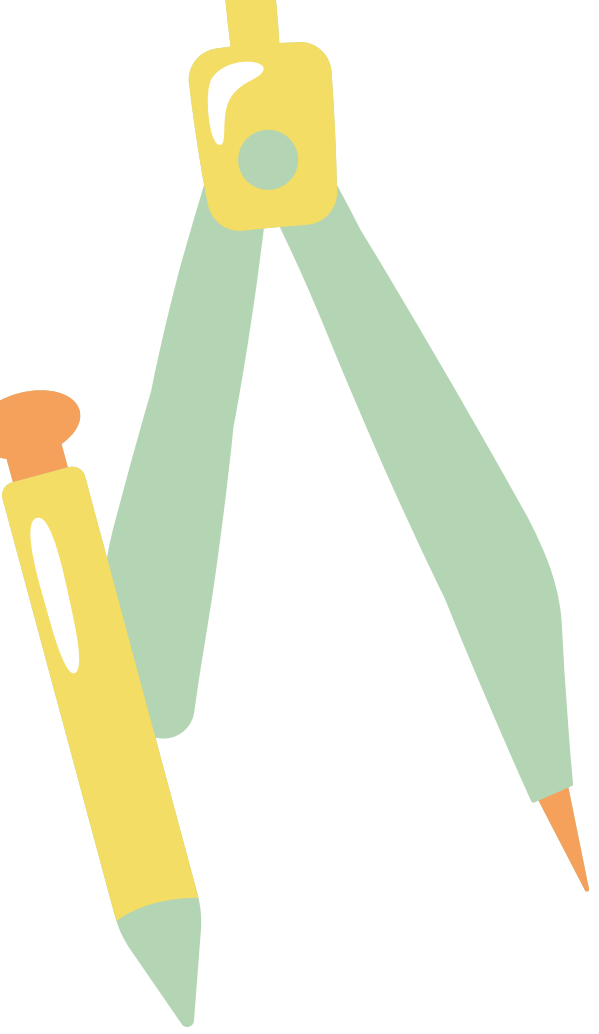




# Chord

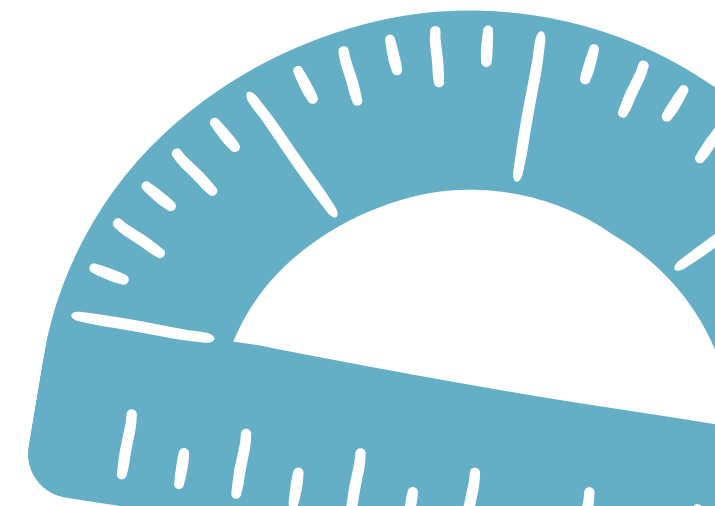
Any straight **line** that starts at one point on the circle and ends at another point on the circle

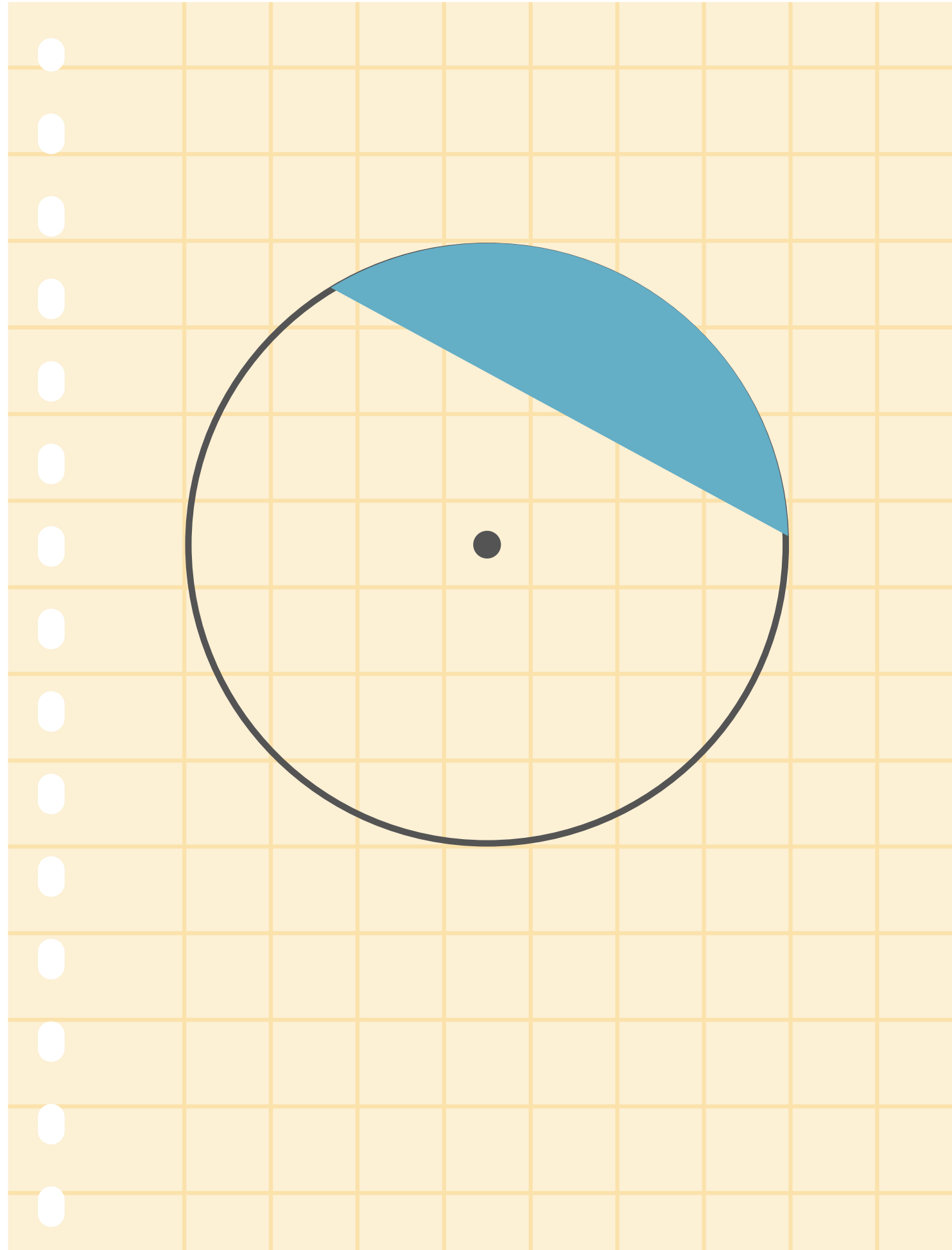
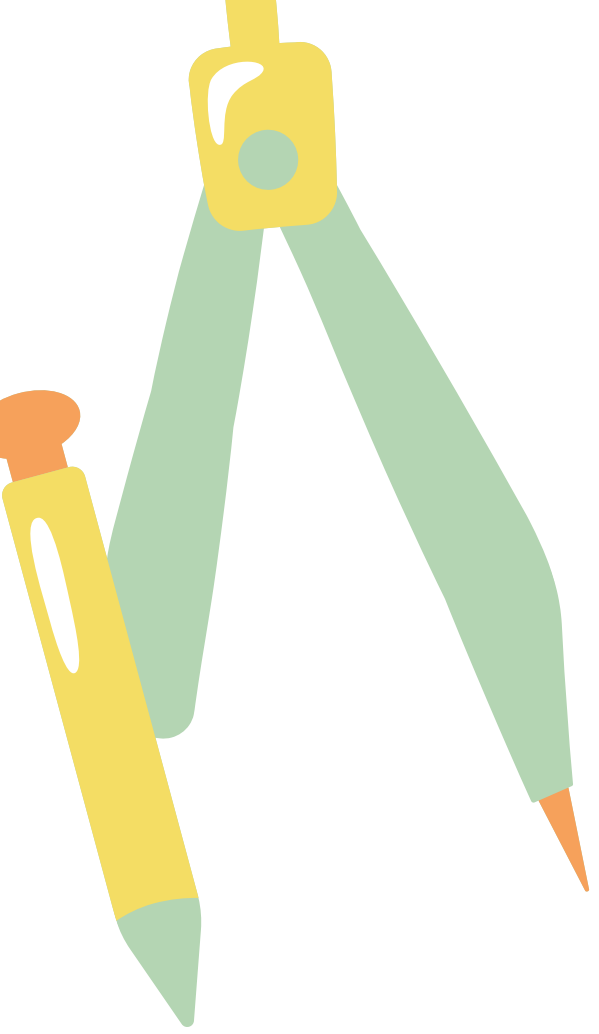




# Chord

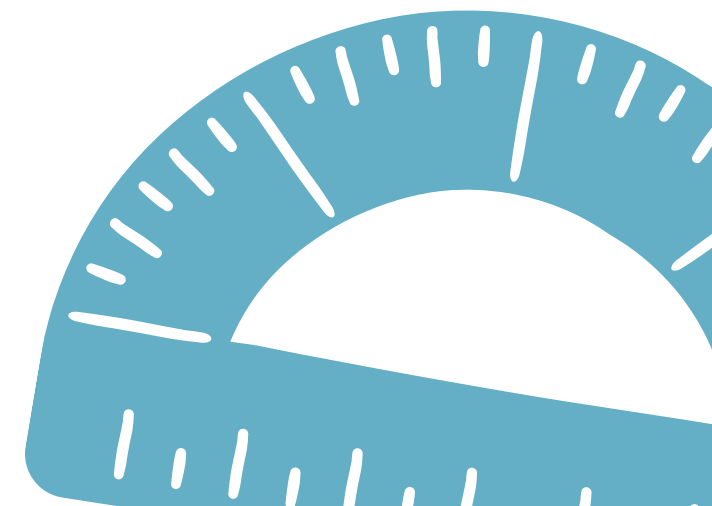
- \* The diameter is a chord, but not every chord is the diameter
- \* The longest chord in a circle is the diameter (ex. line AB in this circle)

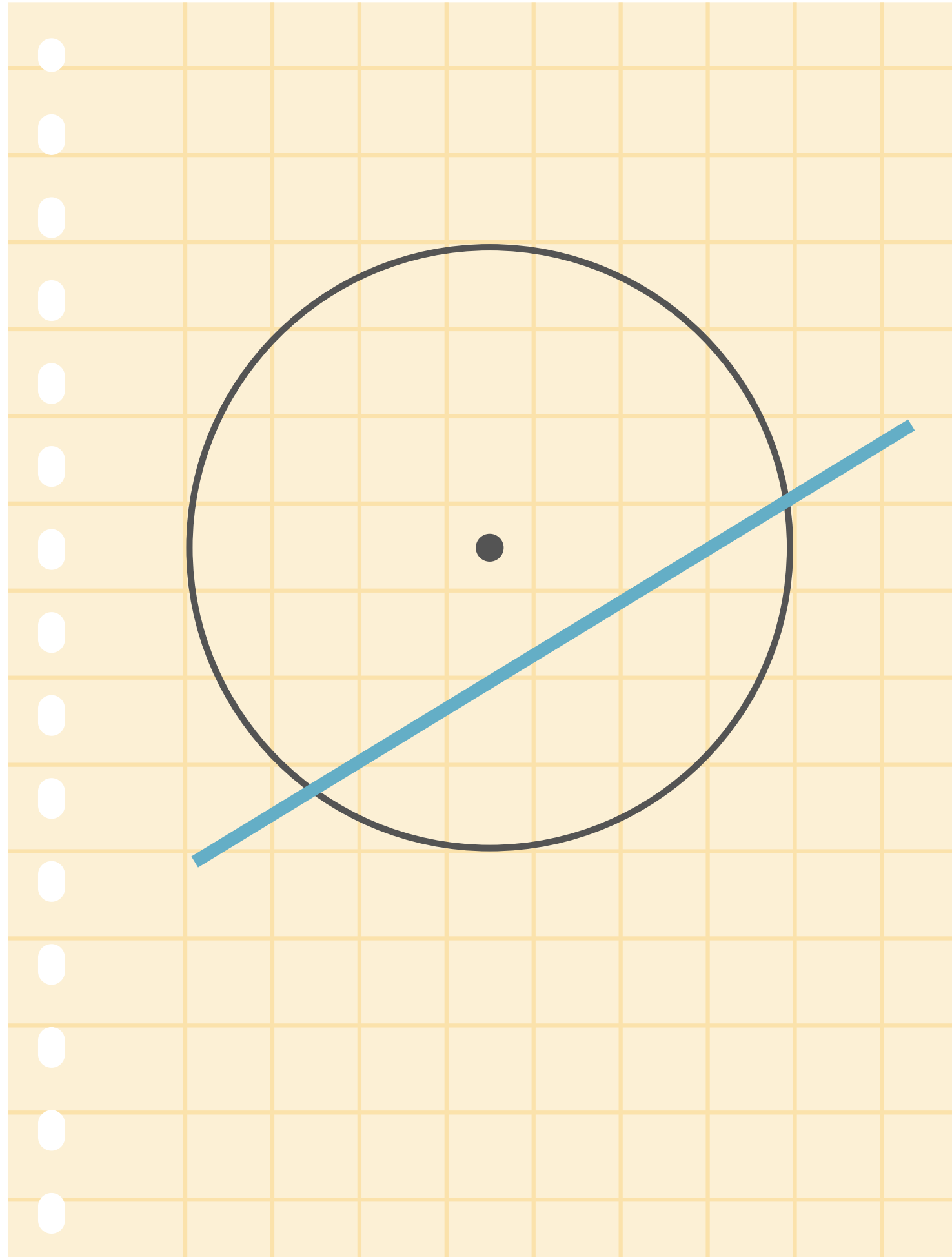
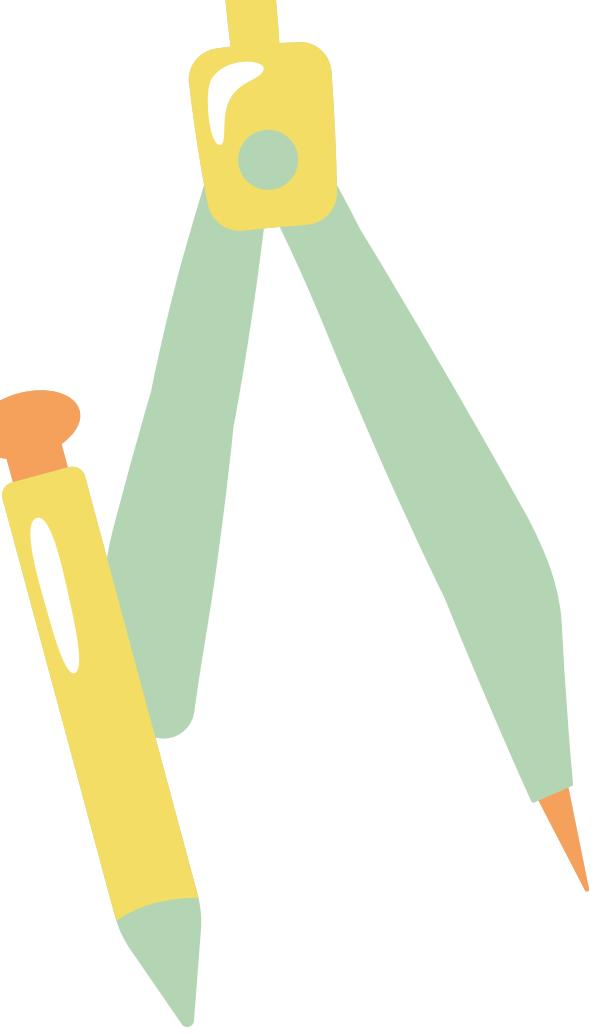




# Segment

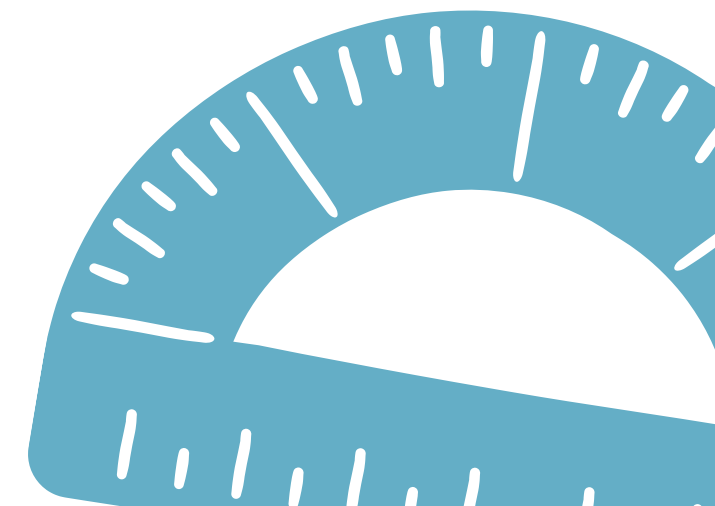
An **area** of the circle enclosed by a chord

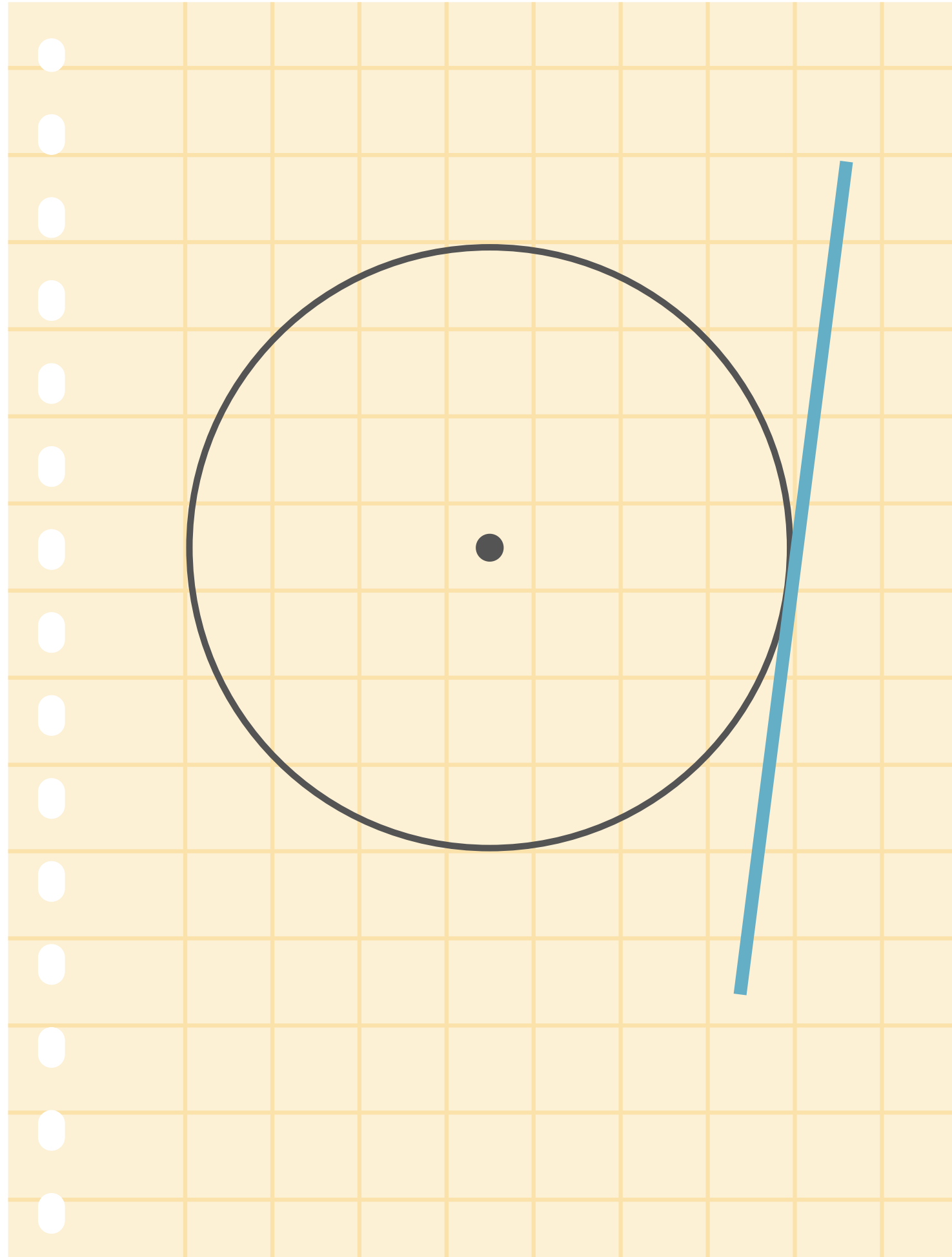
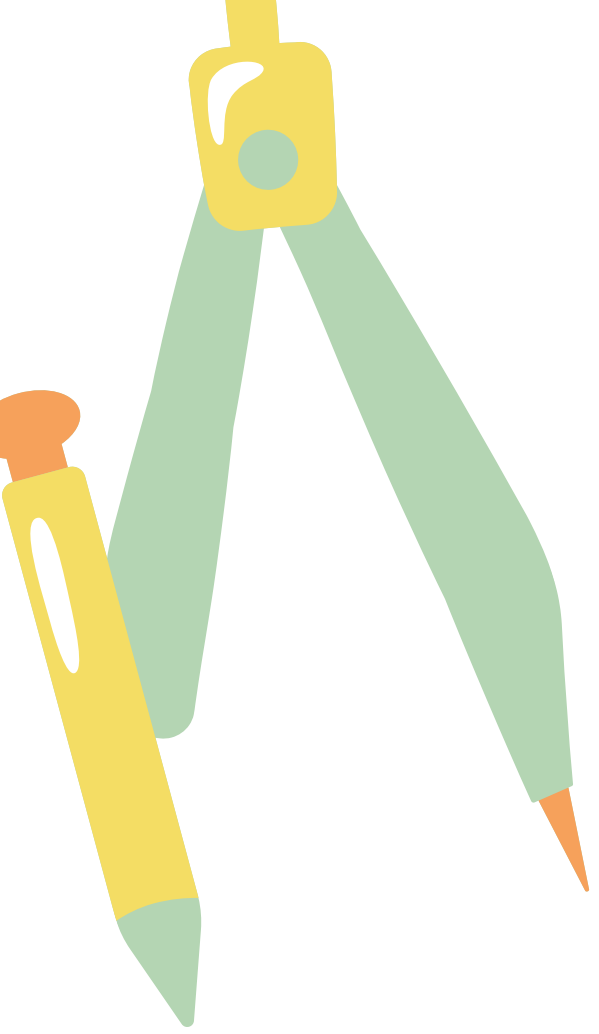




# Secant

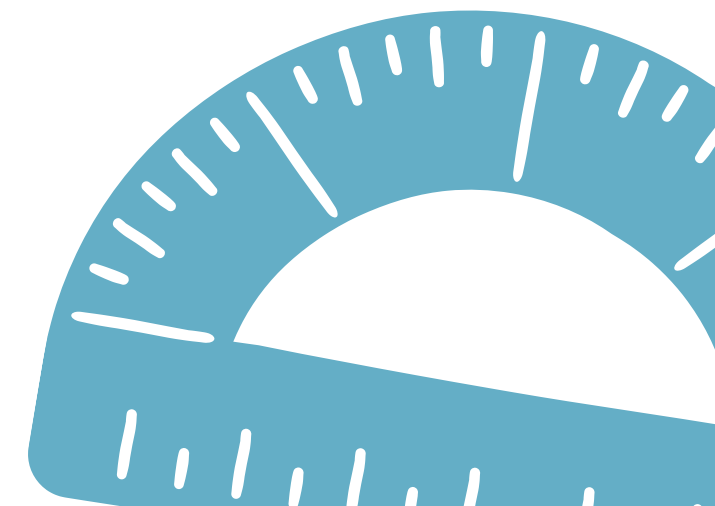
Any straight **line**  
that touches a  
circle at **two** points  
(an extended chord)

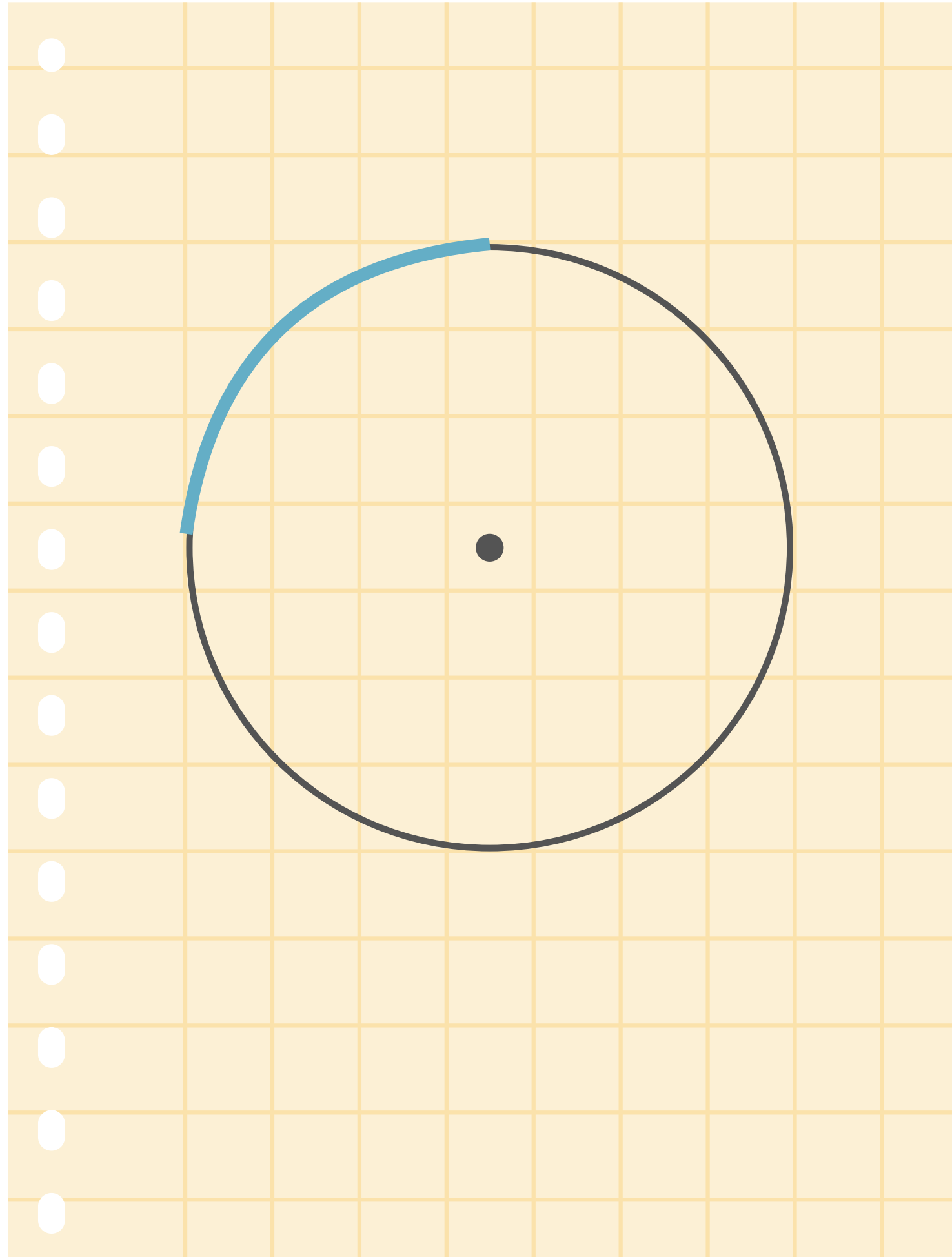
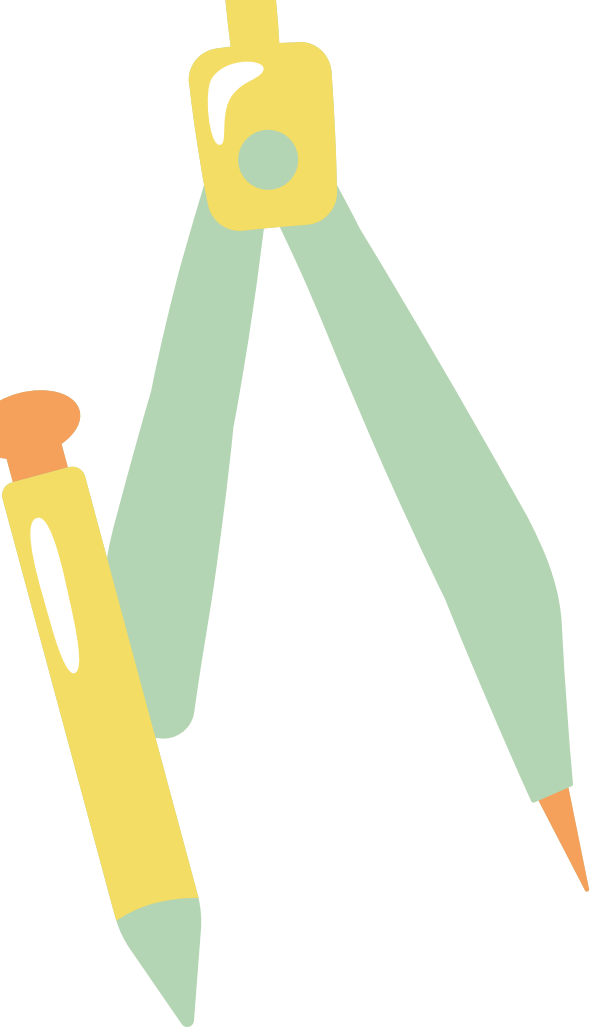




# Tangent

Any straight **line** outside the circle that touches the circle at **one** point

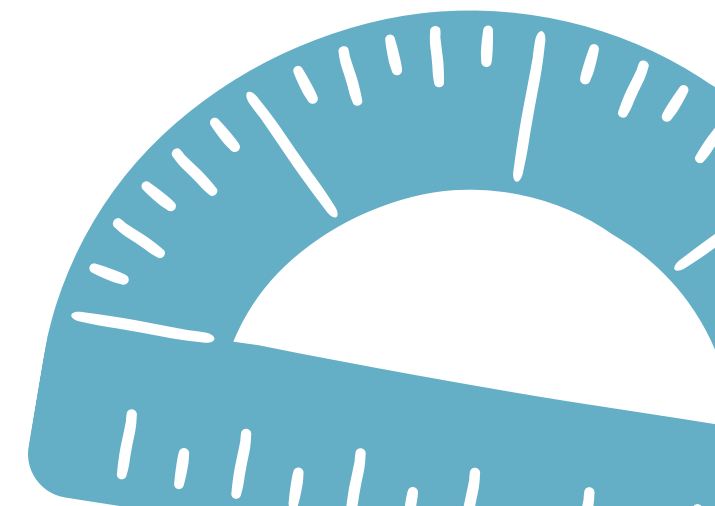


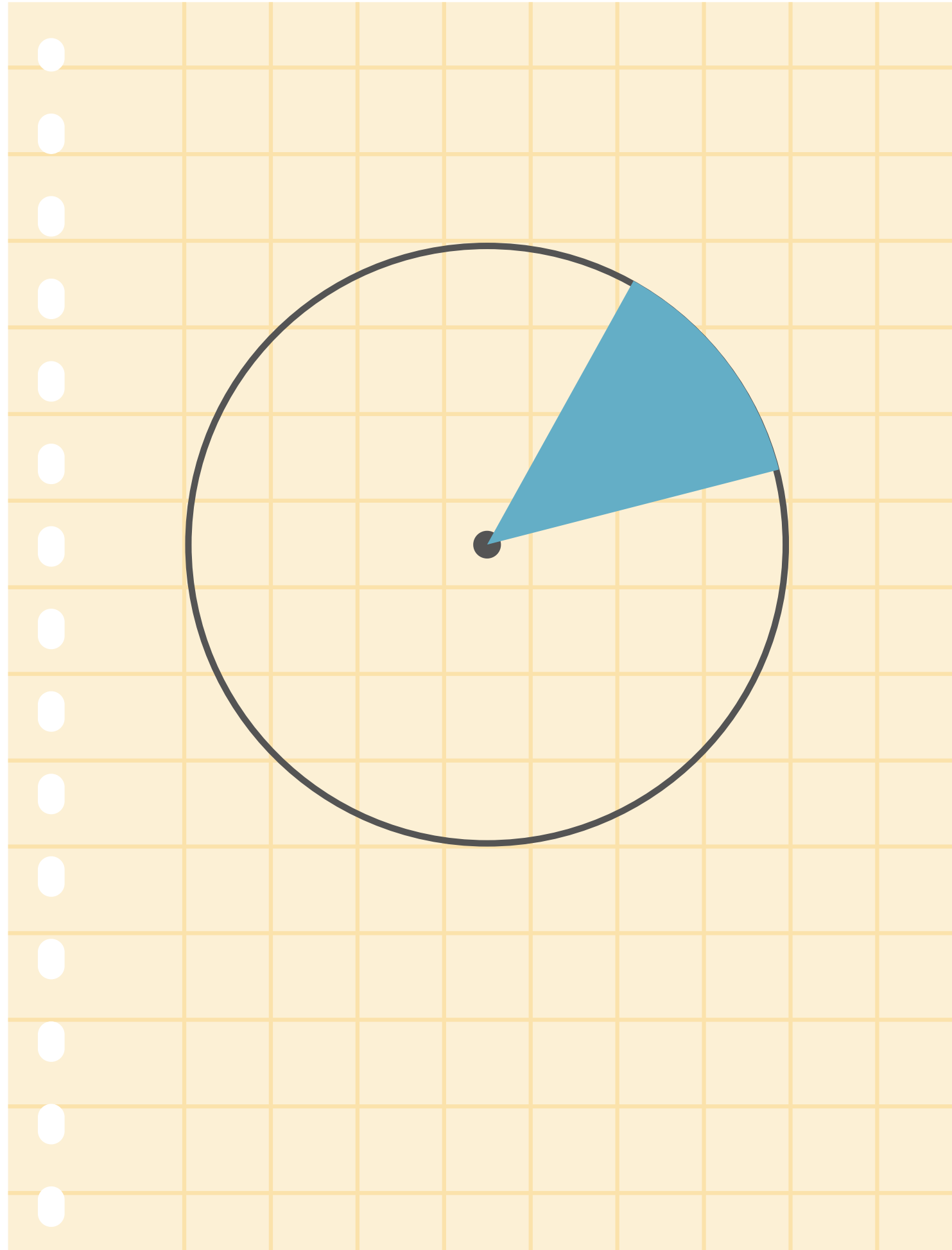
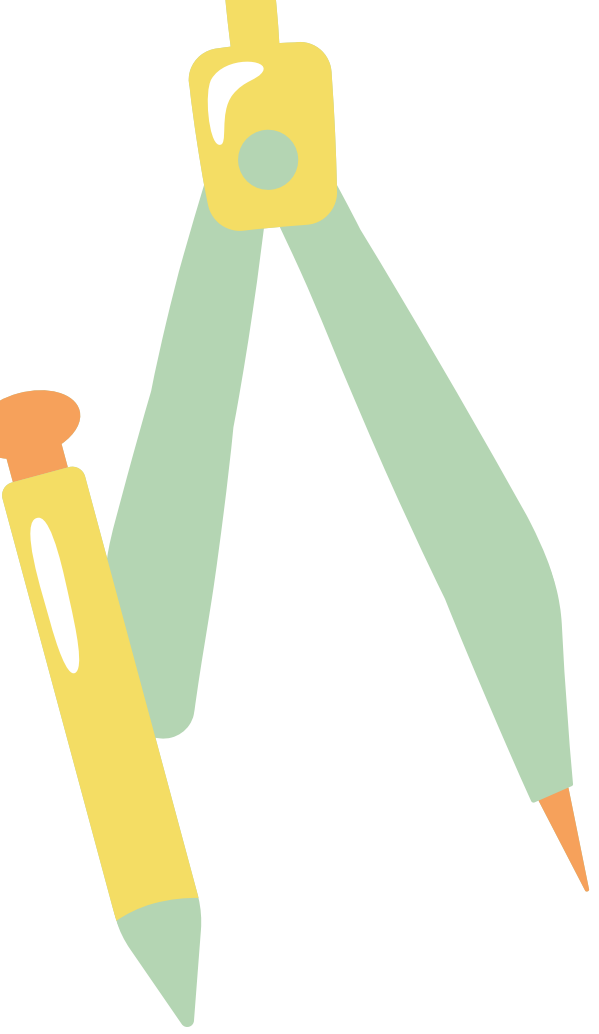


# Arc

Any **part** of the  
outside of the circle

(a section of the  
circumference)

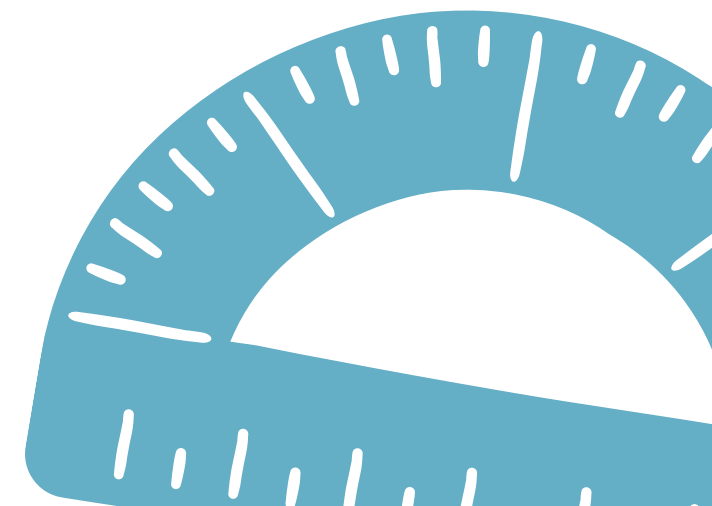


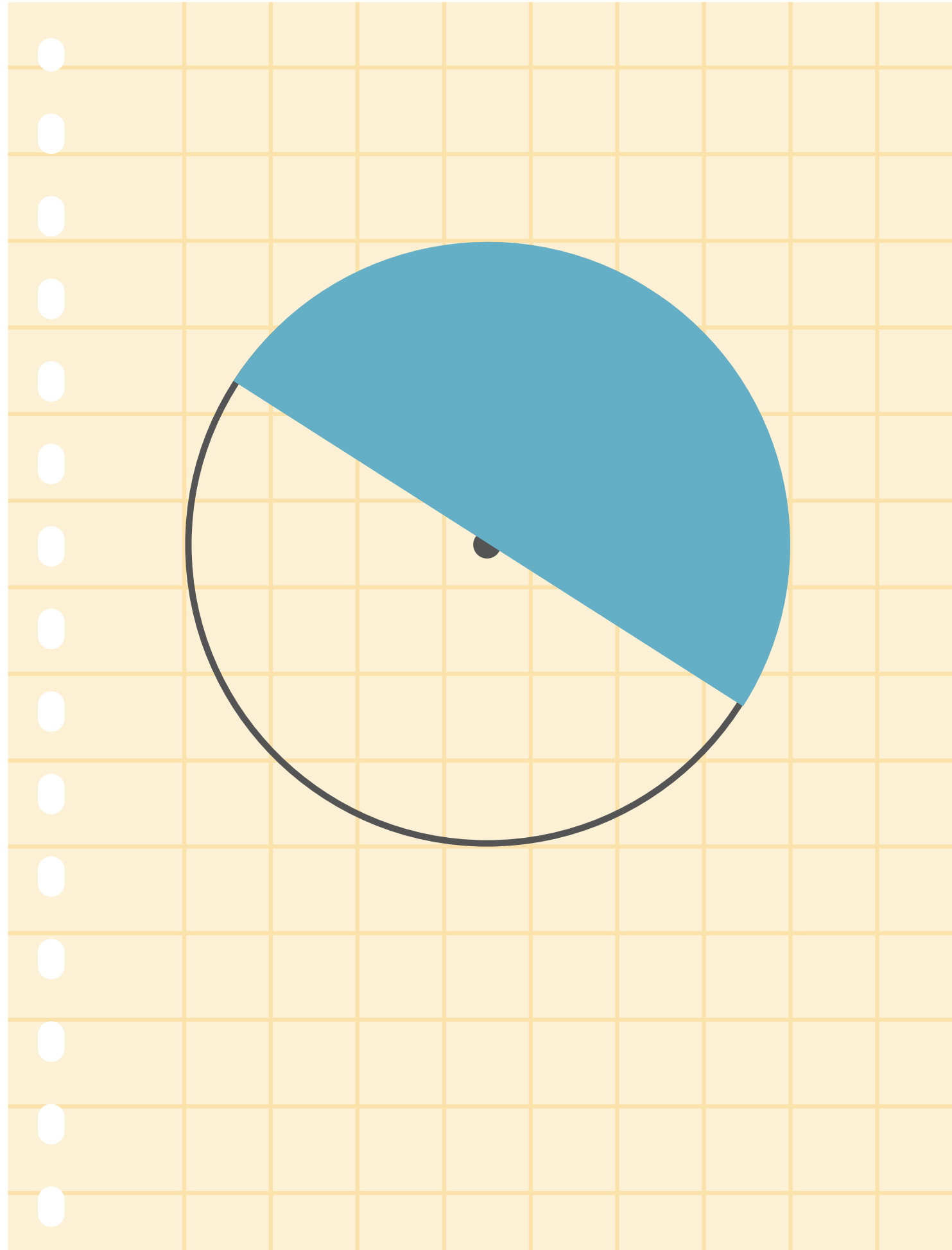
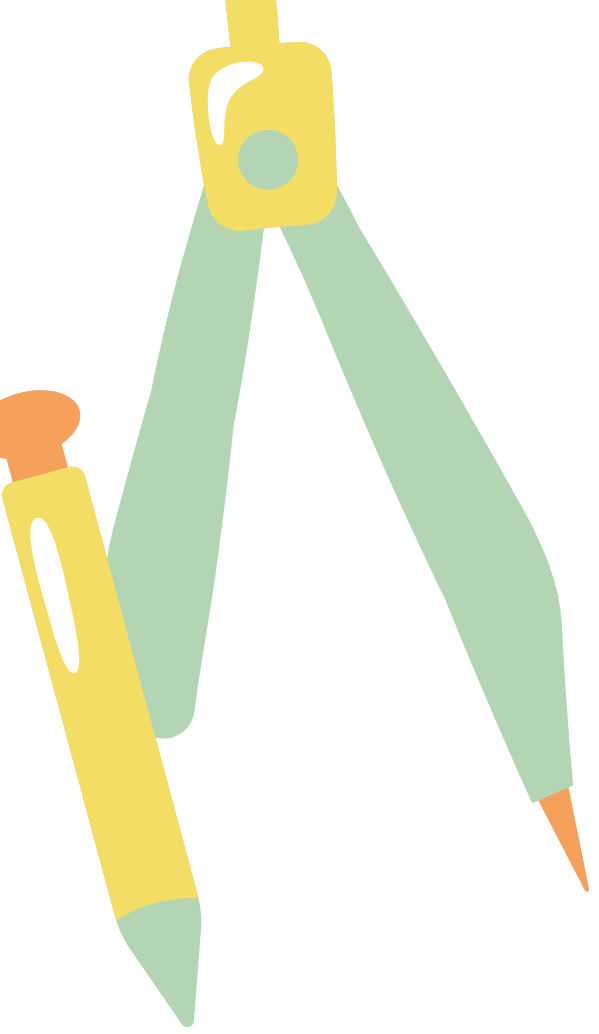


# Sector

An **area** of the circle enclosed by an arc and two radii

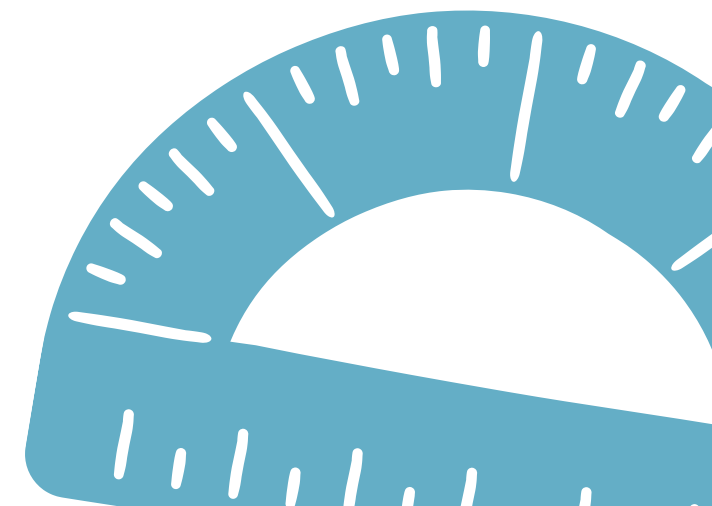
(a pizza slice!)





# Semicircle

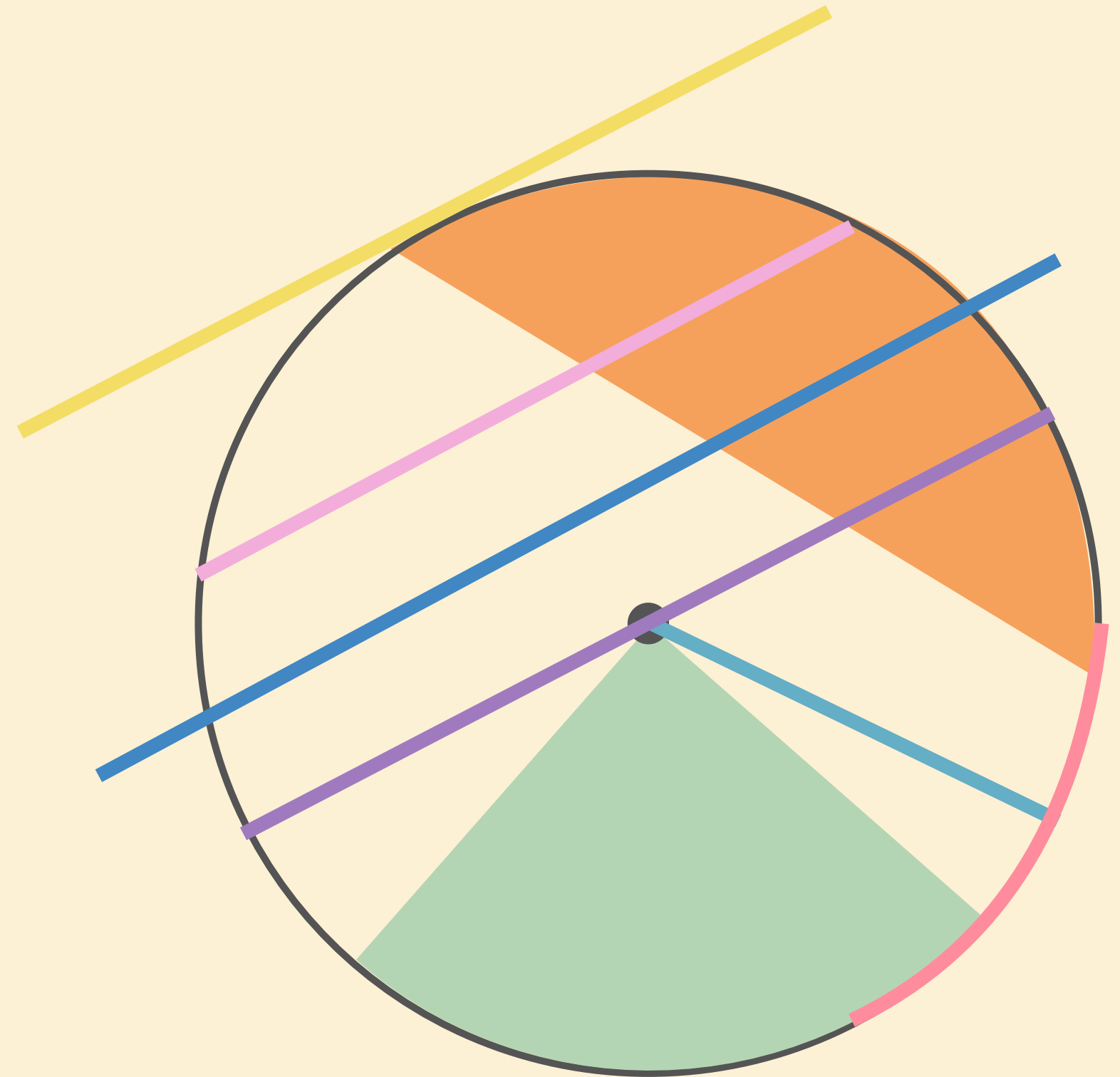
Half of a circle





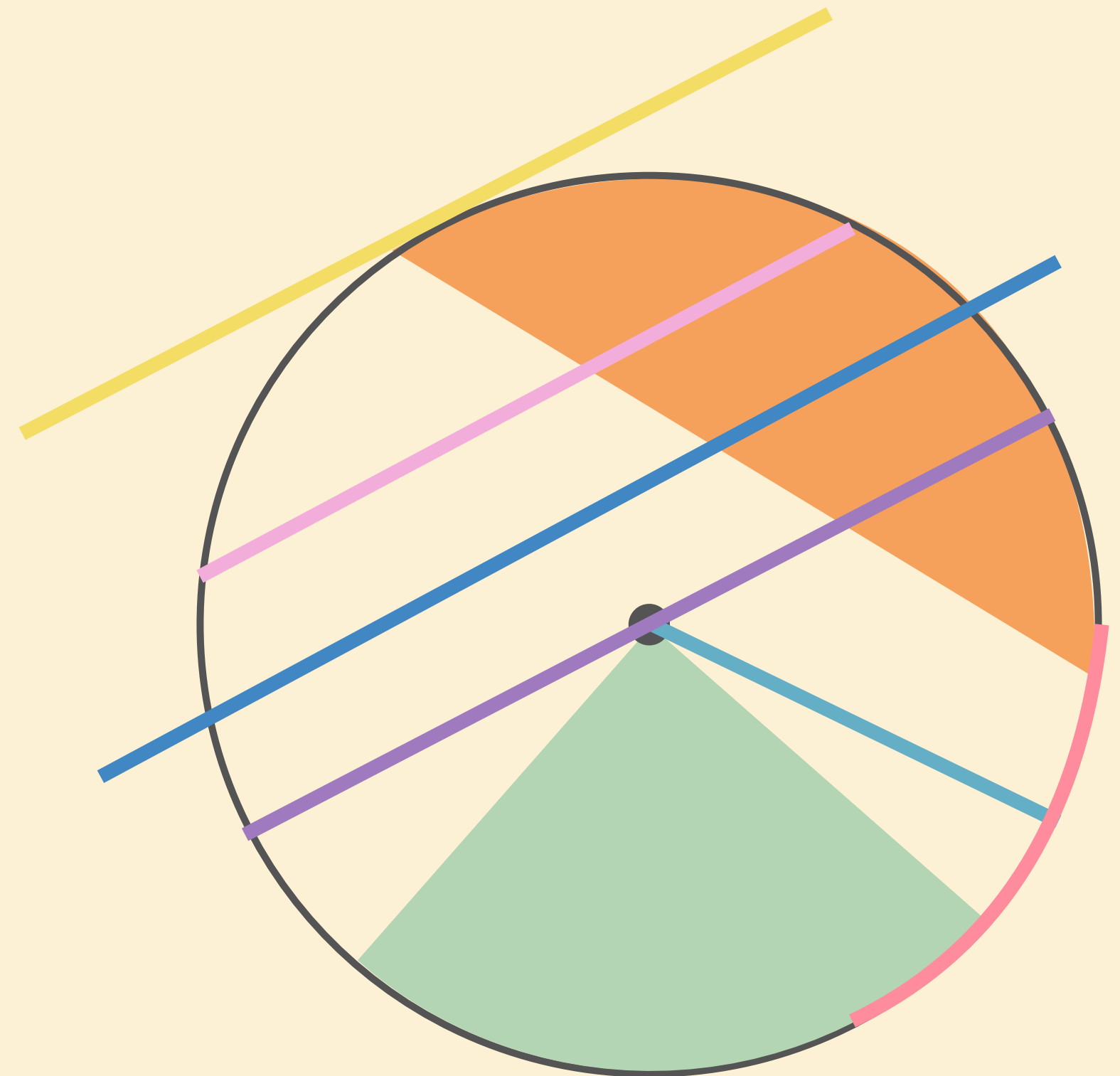
# Label the circle parts

- a)
- b)
- c)
- d)
- e)
- f)
- g)
- h)



# Label the circle parts

- a) tangent
- b) chord
- c) secant
- d) diameter/chord
- e) radius
- f) arc
- g) segment
- h) sector



1 Play "Circle Pairs Game" on Mr. Fitch's website

2 Complete the worksheet

3 Hand in the worksheet

