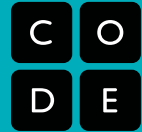
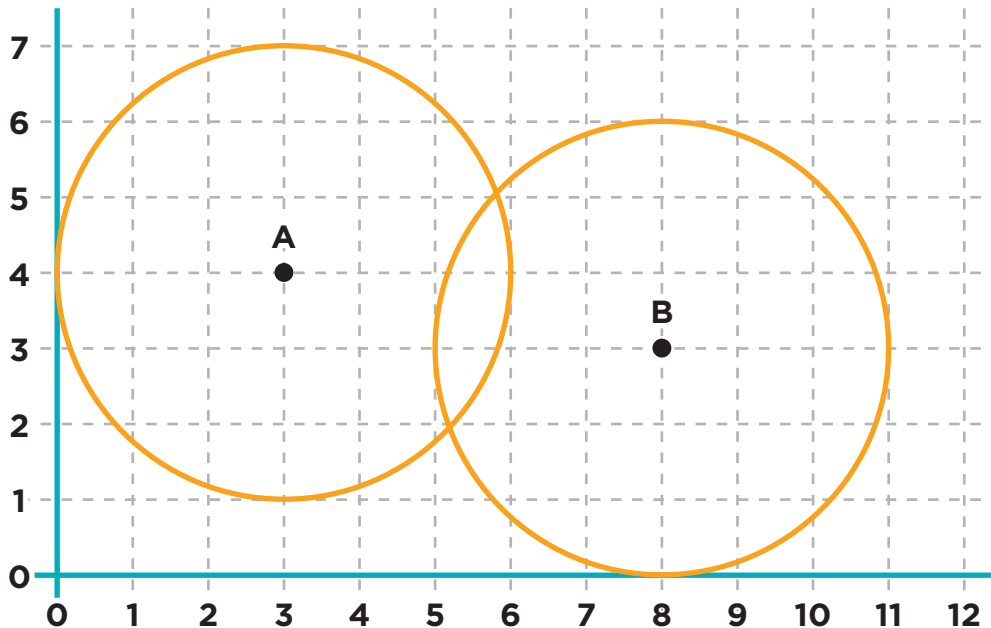


# Collision Detection



Code.org CS in Algebra - Stage 19

## Graph #2



### On the graph:

Draw a segment from point A to point B

Label segment AB as  $c$

Draw a right triangle using segment  $c$  as the hypotenuse.

Label the right angle as  $C$

Label segment AC as  $b$

Label segment CB as  $a$

1. What is the radius of circle A? \_\_\_\_\_
2. What is the radius of circle B? \_\_\_\_\_
3. What is Radius A + Radius B \_\_\_\_\_
4. Do the circles overlap? (true/false) \_\_\_\_\_
5. What is the length of side  $a$ ? \_\_\_\_\_
6. What is the length of side  $b$ ? \_\_\_\_\_
7. Estimate the length of side  $c$ ? \_\_\_\_\_
8. What is  $a^2 + b^2$  \_\_\_\_\_