Munch! Radius Testing
GAME2050 Game Programming I

sprite1 (x,y) radius1

$c = ?$

b

radius2
sprite2 (x,y)

a
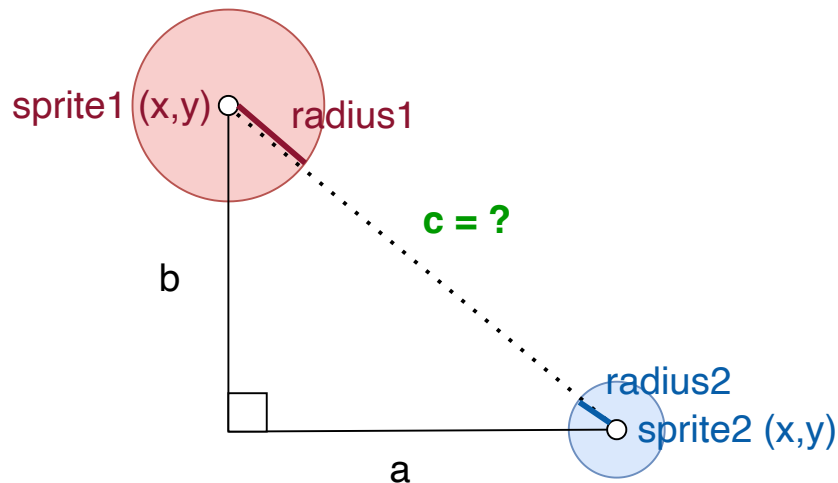
What do we know?
x and y of sprite1
x and y of sprite2
Collision radius of sprite1
Collision radius of sprite2

What do we need to find out?
The distance between the two sprite locations (c) also known as the hypotenuse

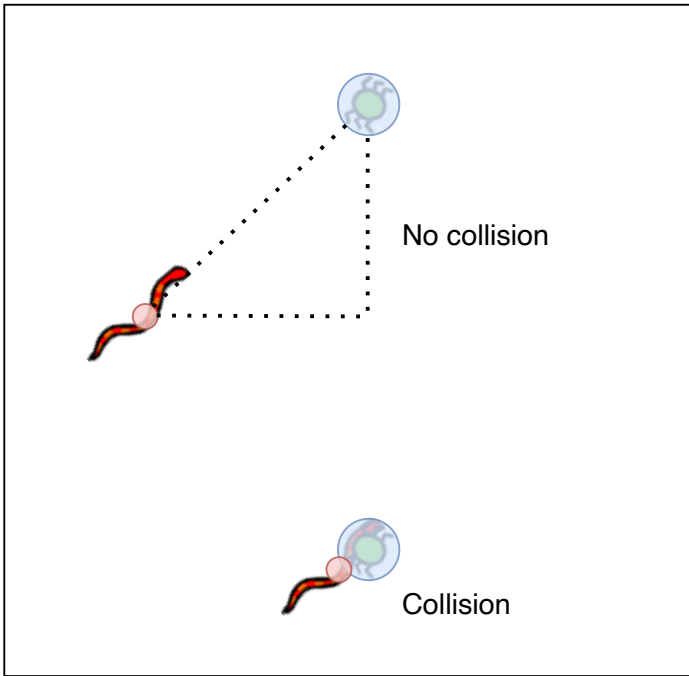Solution : Find a and b and use Pythagorean Theorem to find c

a = sprite2X - sprite1X

b = sprite2Y - sprite1Y

$$c = \sqrt{a^2 + b^2}$$

Collision occurs if the following conditional expression is true:

c ≤ radius1 + radius2

No collision

Collision

Stage