

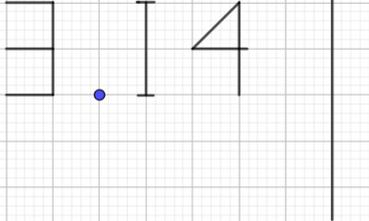
## Pi activities

### Exercise 1 :

Pi: a strange coincidence

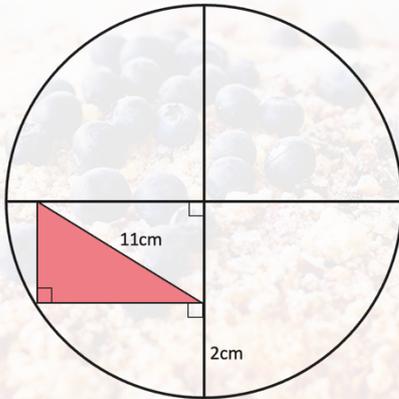
Draw the symmetric of the shape following the straight line (D)

What could you say about what you obtain?



### Exercise 2 :

What is the radius of this circle?



### Exercise 3 :

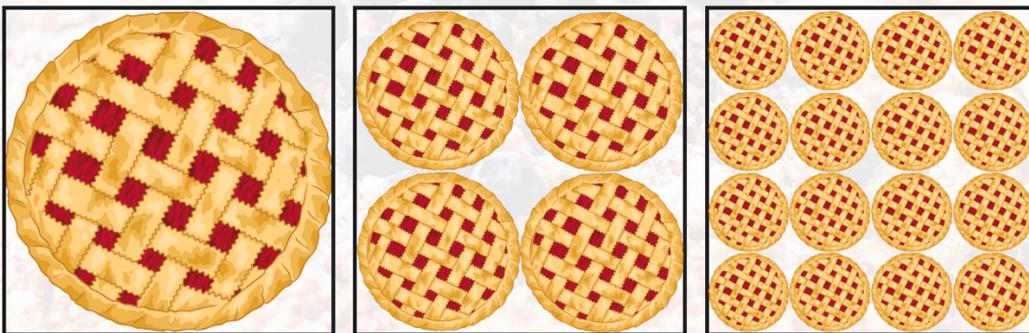
Four pies, with a radius  $r$ , are shown below. The pies are held together by a rubber band.

How long is the rubber band, as stretched below?



### Exercise 4 :

Three identical square boxes are packed with pies of differing sizes. Which box contains the greatest amount of pie, assuming that each pie is the same depth?



### Reminders :

Perimeter of a circle with radius  $r$ :  $P = 2 \times \pi \times r$

Area of a circle with radius  $r$ :  $A = \pi \times r^2$

Exercise 5:

Which fits better (leaves the least space), a square inside a circle or a circle inside a square?

