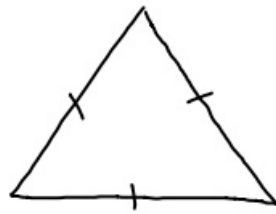3-19-18   5ᵀᴴ Geo

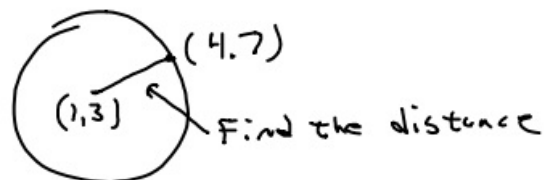How many degrees must I rotate it until it lands on itself?

120°

Ex: $(x-4)^2 + (y+3)^2 = 25$

Center : $(4, -3)$

radius : 5

① The equation $(x-1)^2 + (y-3)^2 = r^2$ represents circle A. The pt. $(4, 7)$ lies on circle. What is the radius?

(4,7)

(1,3)   Find the distance

OR

$(x-1)^2 + (y-3)^2 = r^2$

Plug $(4,7)$ in

$(4-1)^2 + (7-3)^2 = r^2$

$9 + 16 = r^2$

$25 = r^2$

$5 = r$

② What point lies on the circle represented by
$$(x-1)^2 + (y-3)^2 = 7^2$$

A. $(-1, 4)$

B. $(0, 7)$

C. $(1, 3)$

D. $(8, 3)$

③ Circle O has center $(-2, -2)$ and diameter of 10. Which point lies on circle O.
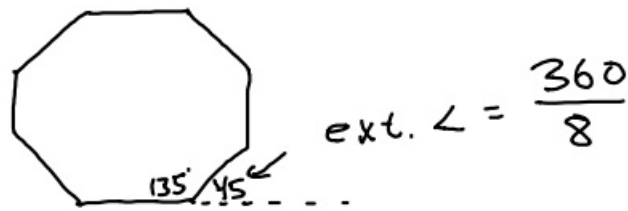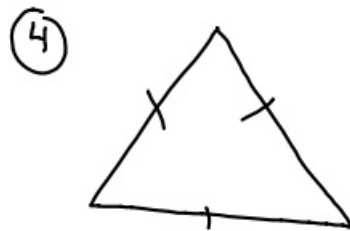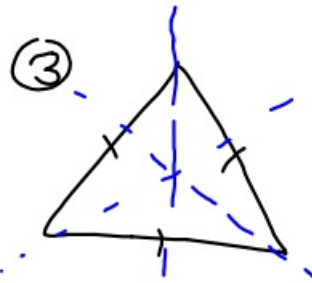
A. $(-6, -5)$ $(x+2)^2 + (y+2)^2 = 25$

B. $(-2, -2)$

C. $(6, 4)$

D. $(8, 8)$

④ Does an Octagon tesselate?

ext. $\angle = \dfrac{360}{8}$
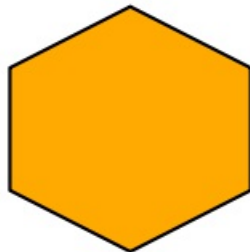
135° 45°

3-19-18   6th Geo

① Tessalations

②

③

④

How many degrees must I rotate it to make it land on itself?
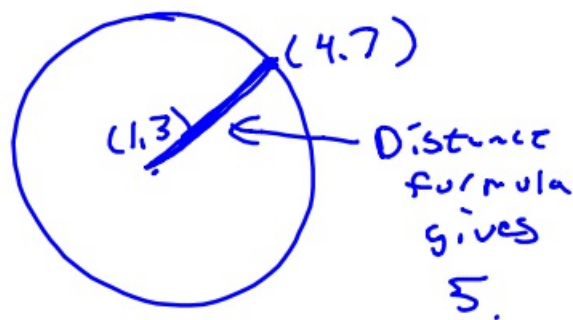120°

⑤

$\dfrac{360}{6} = 60°$ turn

$$(x-3)^2 + (y+2)^2 = 36$$

Center: $(3, -2)$

radius: 6

⑦ The equation $(x-1)^2 + (y-3)^2 = r^2$
represents circle A. The
point $(4,7)$ is on the circle.
What is r?

Ⓐ Center $= (1,3)$

Distance
formula
gives
5.

Ⓑ $(4-1)^2 + (7-3)^2 = r^2$
$9 + 16 = r^2$
$25 = r^2$
$r = 5$

⑧ What point lies on the circle represented by

$$(x-1)^2 + (y-3)^2 = 7^2 ?$$

Ⓐ (-1,4)

Ⓑ (0,7)

Ⓒ (1,3)

Ⓓ (8,3)

⑨ Circle O has a center (-2,-2) and a diameter of 10. Which point lies on circle O?

Ⓐ (-6,-5)

$$(x+2)^2 + (y+2)^2 = 25$$

Ⓑ (-2,-2)

Ⓒ (6,4)

Ⓓ (8,8)