

9-13-19 6th Geo

①



$$A = ?$$

$$A = \pi \cdot r^2$$

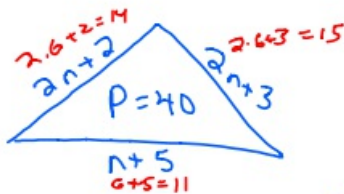
$$= \pi \cdot 4^2$$

$$= 16\pi$$

$$A \approx 50.3 \text{ cm}^2$$

$$C = 2\pi \cdot r \text{ or } \pi \cdot d$$

- ② If the perimeter of Δ is 40 cm with side lengths of $2n+3$, $n+5$, and $2n+2$, what is the length of the shortest side?



$$2n+2 + n+5 + 2n+3 = 40$$

$$5n + 10 = 40$$

$$\underline{-10 \quad -10}$$

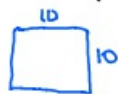
$$5n = 30$$

$$n = 6$$

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- ③ Give picture of

area > perimeter



$$A = 100 \text{ units}^2$$

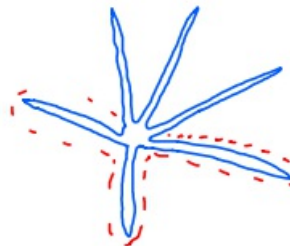
$$P = 40 \text{ units}$$

perimeter > area



$$A = 4 \text{ units}^2$$

$$P = 8 \text{ units}$$



Polygons

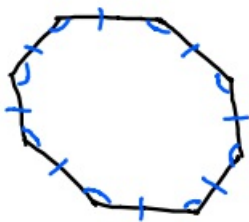
- 3 triangle
- 4 quadrilateral
- 5 pentagon
- 6 hexagon
- 7 heptagon/septagon
- 8 octagon
- 9 nonagon
- 10 decagon
- 12 do-decagon
- 11 11-gon

Regular vs. Irregular shapes

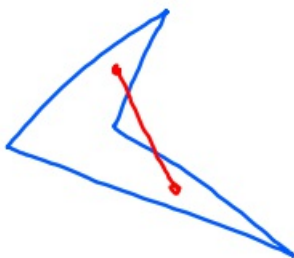


All sides equal in length

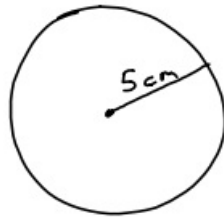
All angles equal.



Concave vs. Convex



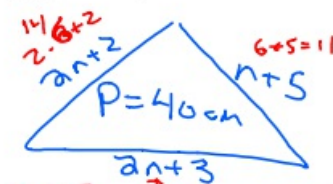
9-13-19 7th Geo



$A = ?$

$$\begin{aligned} A &= \pi r^2 \\ &= \pi \cdot 5^2 \\ &= 25\pi \text{ Exact} \\ &\approx 78.5 \text{ cm}^2 \end{aligned}$$

② If the perimeter of a Δ is 40 cm and it has side lengths of $2n+2$, $n+5$, and $2n+3$, what is the length of the longest side?



$$2n+2+n+5+2n+3=40$$

$$\begin{array}{r} 5n+10=40 \\ -10 \quad -10 \\ \hline \end{array}$$

$$\frac{5n}{5} = \frac{30}{5}$$

$$n=6$$

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③ Give a picture of a shape where

a.) Perimeter $>$ Area



$$\begin{aligned} P &= 8 \text{ cm} \\ A &= 4 \text{ cm}^2 \end{aligned}$$

b.) Area $>$ Per.




$$\begin{aligned} A &= 100 \text{ cm}^2 \\ P &= 40 \text{ cm} \end{aligned}$$

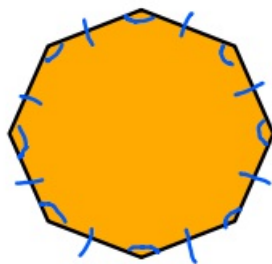


Polygons

3	Triangle
4	Quadrilateral
5	Pentagon
6	Hexagon
7	Heptagon/Septagon
8	Octagon
9	Nonagon
10	decagon
11	11-gon
12	do-decagon

Regular vs. Irregular 

↓
all sides are = in length
all angles are =



Concave vs. Convex

