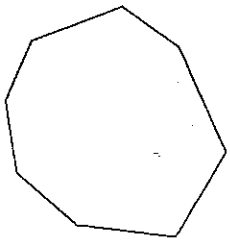


Section 3.4B

Write the name of each polygon.

1)

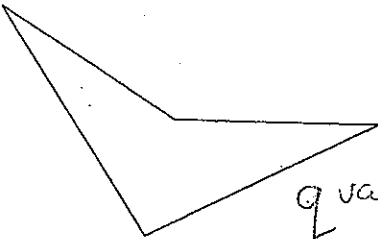


Octagon

2)

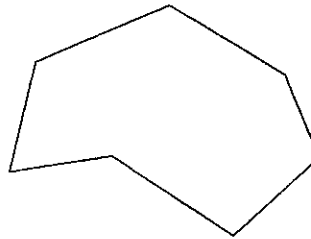


3)

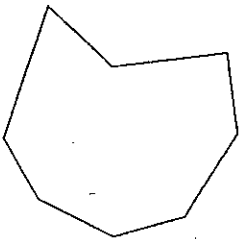


Quadrilateral

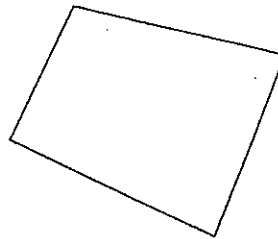
4)



5)

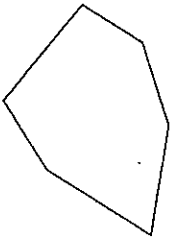


6)

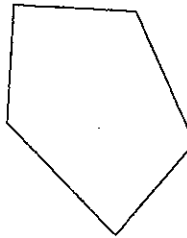


State if each polygon is concave or convex.

7)

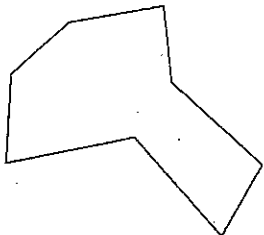


8)

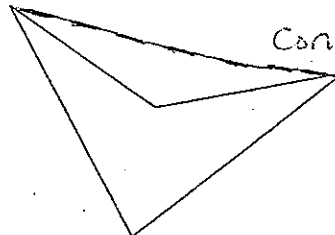


Convex

9)



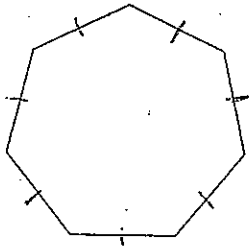
10)



Concave

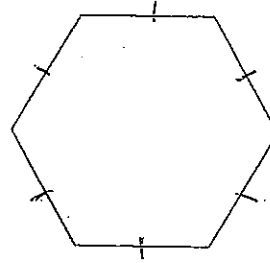
State if each polygon is regular or not.

11)

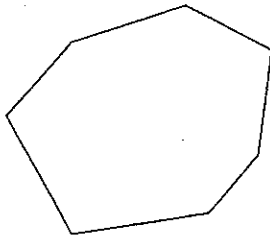


regular

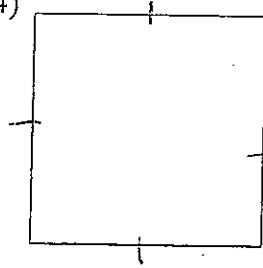
12)



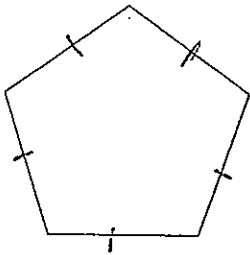
13)



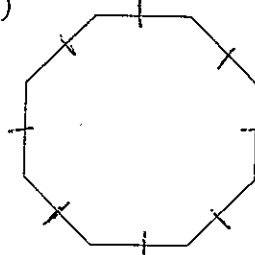
14)



15)

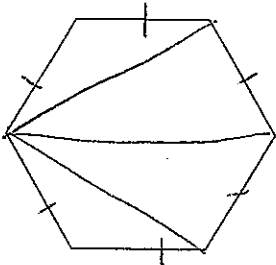


16)



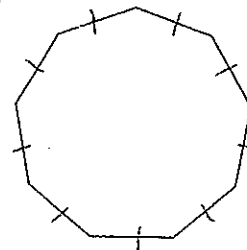
Find the interior angle sum for each regular polygon. Round your answer to the nearest tenth if necessary. Support your work!

17)

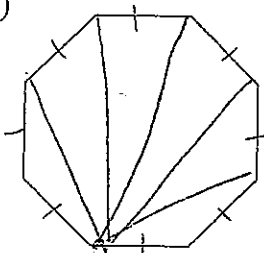


$$4(180) = 720^\circ$$

18)

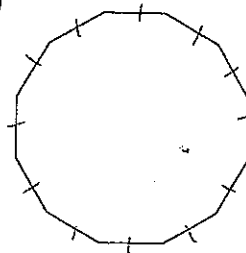


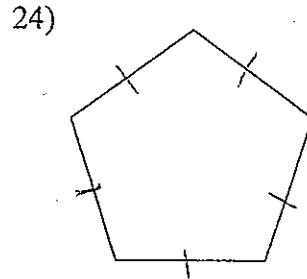
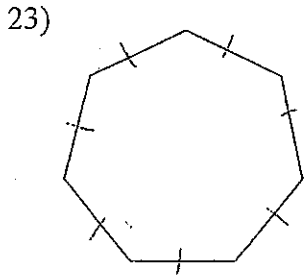
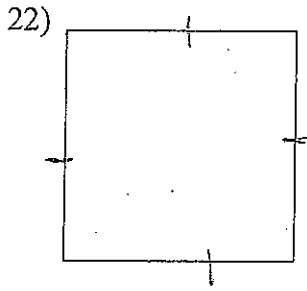
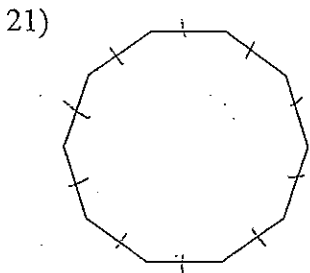
19)



$$6(180) =$$

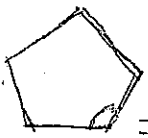
20)





Find the measure of one interior angle in each polygon. Round your answer to the nearest tenth if necessary. Support your work! $n-2(180)$

25) regular pentagon = 5 sides ⁿ



$$3(180) =$$

$$\frac{540}{5} =$$

$$108^\circ$$

26) regular decagon

$$\frac{(10-2)180}{10}$$

$$= \frac{8(180)}{10}$$

$$= \frac{1440}{10}$$

$$= 144^\circ$$

27) regular hexagon

28) regular heptagon

$$\frac{(7-2)(180)}{7} = \frac{5(180)}{7} = \frac{900}{7} = 128.6$$

Find the measure of one exterior angle in each polygon. Round your answer to the nearest tenth if necessary. Support your work!

29) regular pentagon

All exterior angles add to 360°

$$\frac{360}{5} = 72^\circ$$

$$\frac{360}{n}$$

30) regular octagon

31) regular decagon = 10 sides

32) regular heptagon

$$\frac{360}{10} = 36^\circ$$