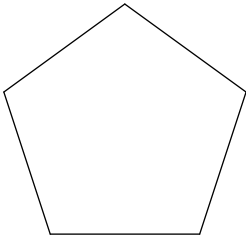


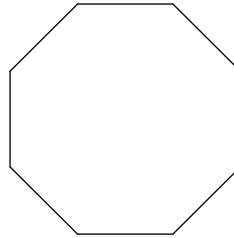
## Polygons and Angles

**Find the measure of one interior angle in each polygon. Round your answer to the nearest tenth if necessary.**

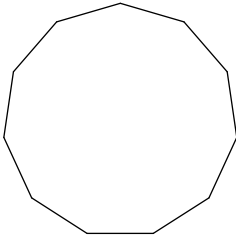
1)



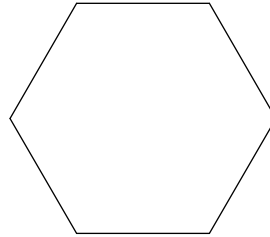
2)



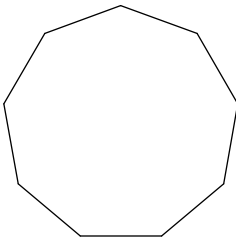
3)



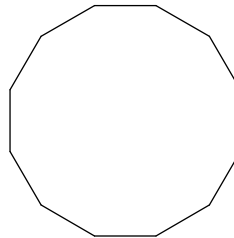
4)



5)



6)



7) regular 24-gon

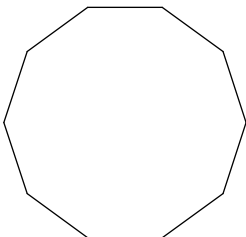
8) regular quadrilateral

9) regular 23-gon

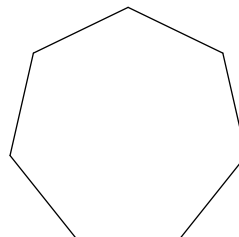
10) regular 16-gon

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

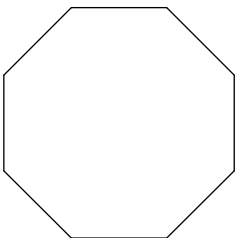
11)



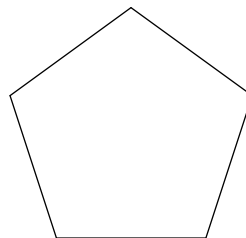
12)



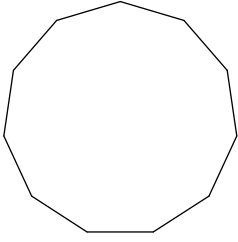
13)



14)



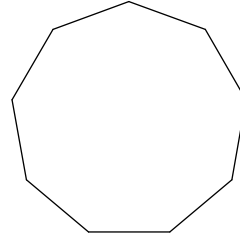
15)



17) regular 13-gon

19) regular 20-gon

16)

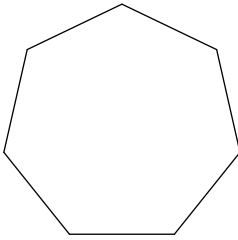


18) regular 16-gon

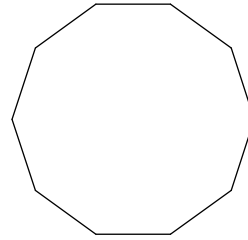
20) regular 23-gon

**Find the interior angle sum for each polygon. Round your answer to the nearest tenth if necessary.**

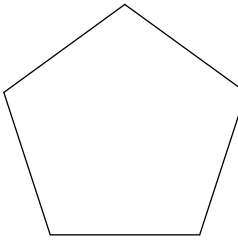
21)



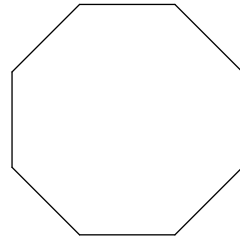
22)



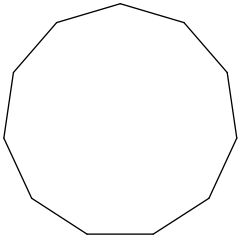
23)



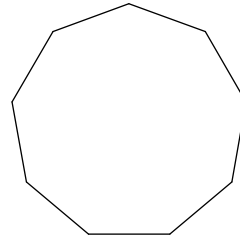
24)



25)



26)



27) regular quadrilateral

28) regular 18-gon

29) regular dodecagon

30) regular 15-gon

**Critical thinking questions:**

31) What is the exterior angle sum of a 500-gon?

32) Is there a regular polygon with an interior angle sum of  $9000^\circ$ ? If so, what is it?