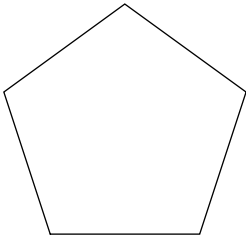


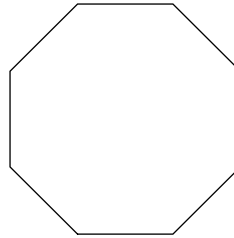
Polygons and Angles

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

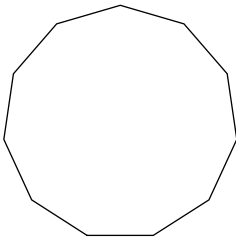
1)



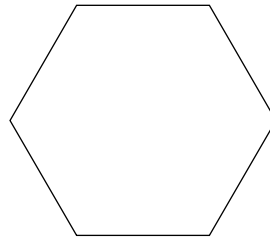
2)



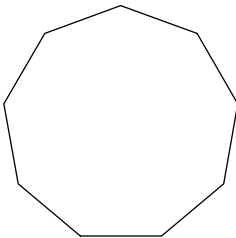
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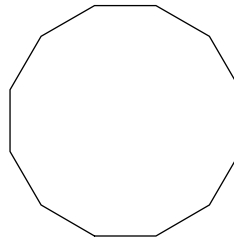
4)



5)



6)



7) regular 24-gon

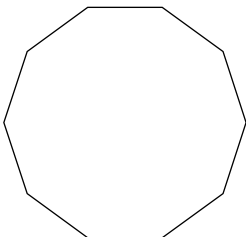
8) regular quadrilateral

9) regular 23-gon

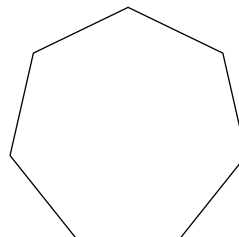
10) regular 16-gon

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

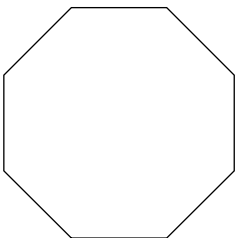
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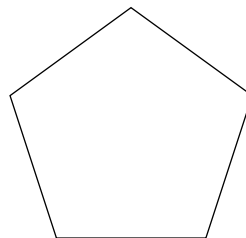
12)



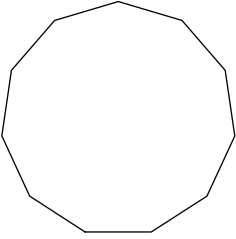
13)



14)



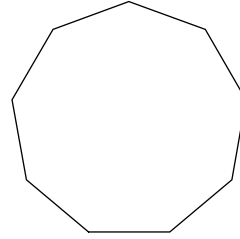
15)



17) regular 13-gon

19) regular 20-gon

16)

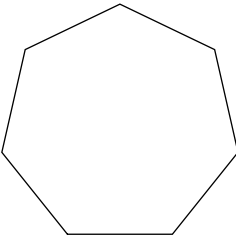


18) regular 16-gon

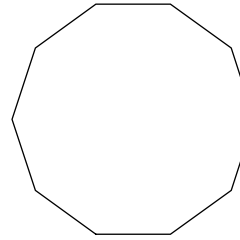
20) regular 23-gon

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

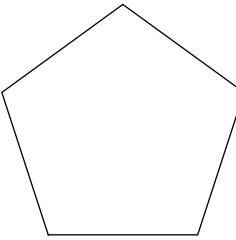
21)



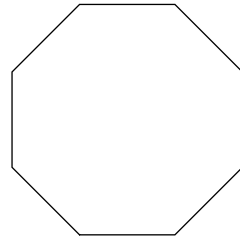
22)



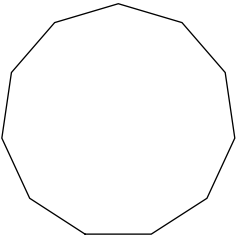
23)



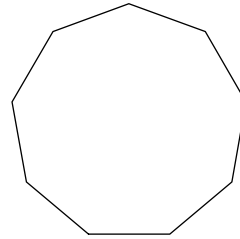
24)



25)



26)



27) regular quadrilateral

28) regular 18-gon

29) regular dodecagon

30) regular 15-gon

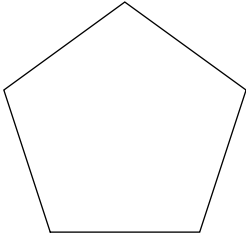
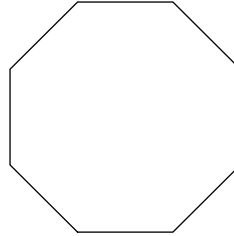
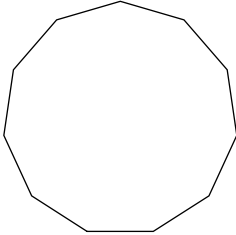
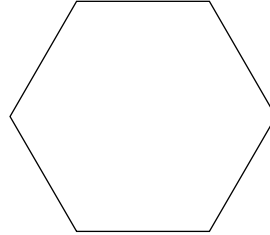
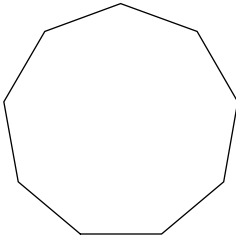
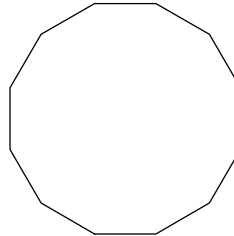
Critical thinking questions:

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

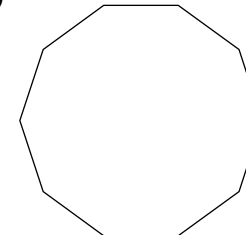
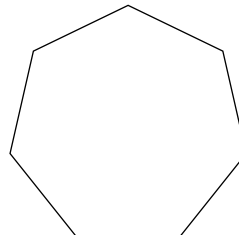
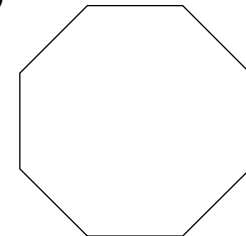
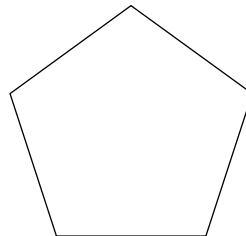
32) Is there a regular polygon with an interior angle sum of 9000° ? If so, what is it?

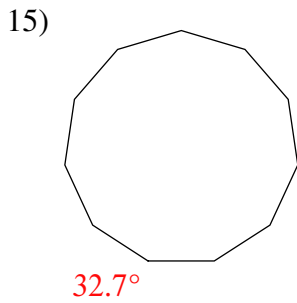
Polygons and Angles

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

1) 108° 2) 135° 3) 147.3° 4) 120° 5) 140° 6) 150° 7) regular 24-gon 165° 8) regular quadrilateral 90° 9) regular 23-gon 164.3° 10) regular 16-gon 157.5°

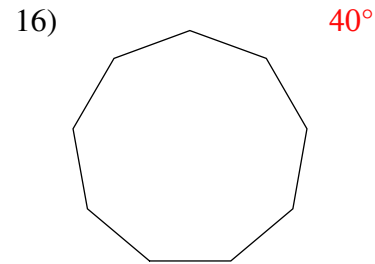
Find the measure of one exterior angle in each polygon. Round your answer to the nearest tenth if necessary.

11) 36° 12) 51.4° 13) 45° 14) 72° 



17) regular 13-gon
 27.7°

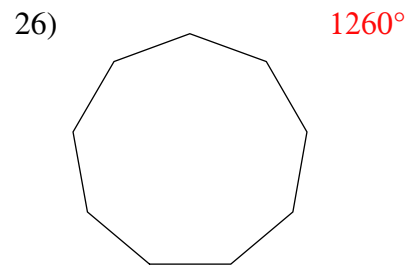
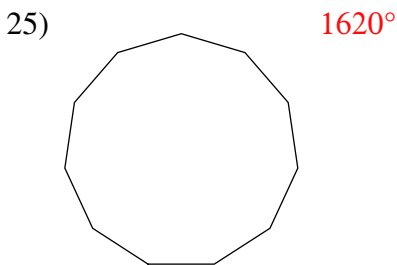
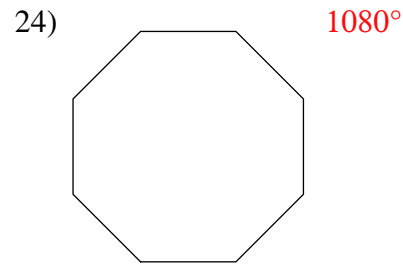
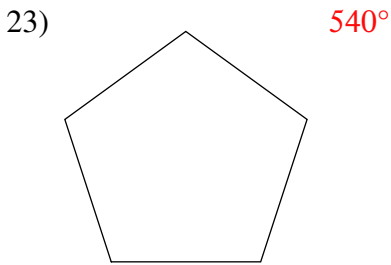
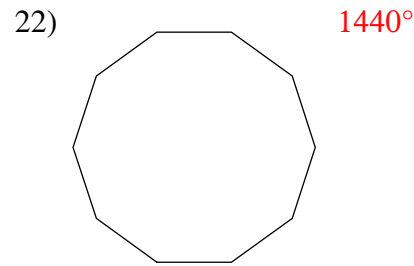
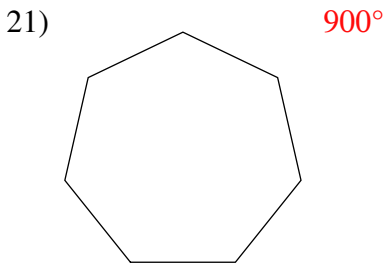
19) regular 20-gon
 18°



18) regular 16-gon 22.5°

20) regular 23-gon 15.7°

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



27) regular quadrilateral
 360°

28) regular 18-gon 2880°

29) regular dodecagon
 1800°

30) regular 15-gon 2340°

Critical thinking questions:

31) What is the exterior angle sum of a 500-gon?
 360°

32) Is there a regular polygon with an interior angle sum of 9000° ? If so, what is it?
Yes, regular 52-gon.