

Unit 7.4 Angle Measures in Polygons EXAMPLE

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

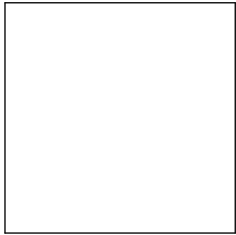
1) regular decagon

2) regular 18-gon

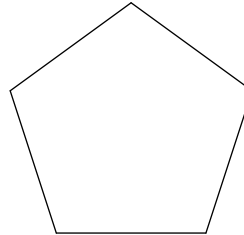
3) regular 21-gon

4) regular 25-gon

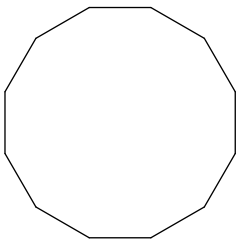
5)



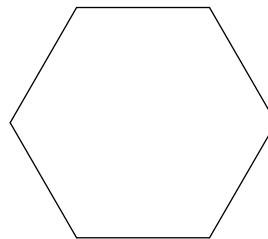
6)



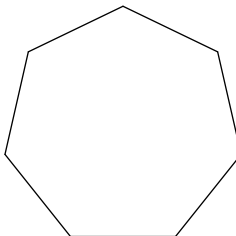
7)



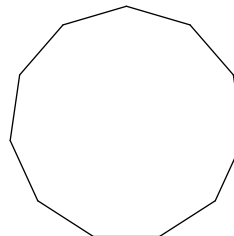
8)



9)



10)



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

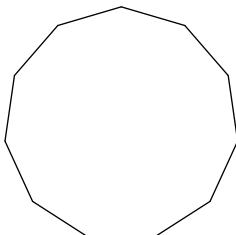
11) regular 21-gon

12) regular dodecagon

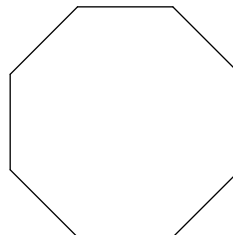
13) regular 11-gon

14) regular 22-gon

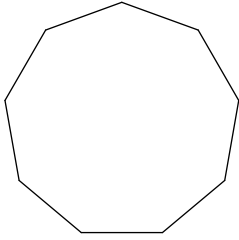
15)



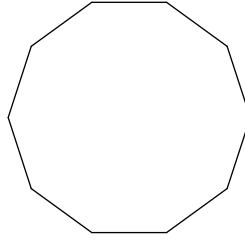
16)



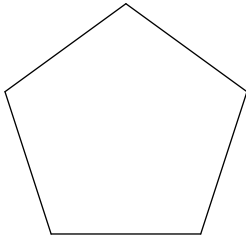
17)



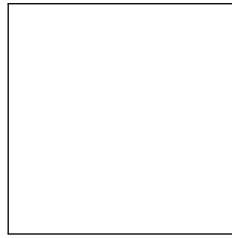
18)



19)



20)



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

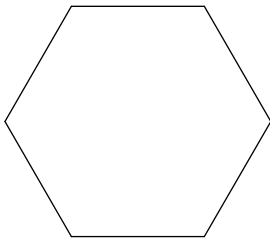
21) regular decagon

22) regular 21-gon

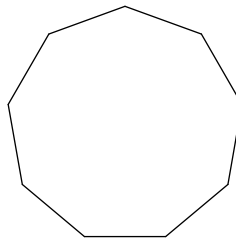
23) regular 22-gon

24) regular pentagon

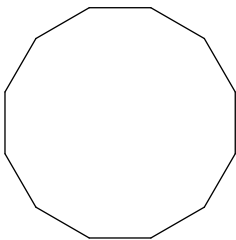
25)



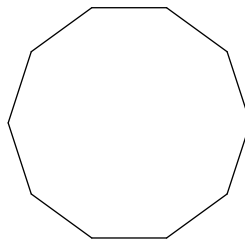
26)



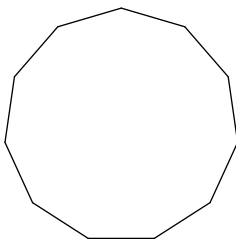
27)



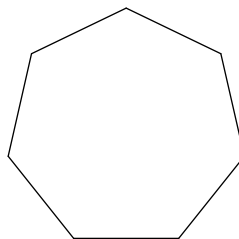
28)



29)



30)



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

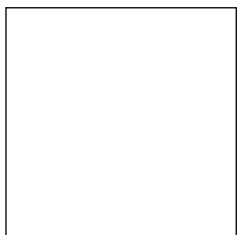
1) regular decagon

 144°

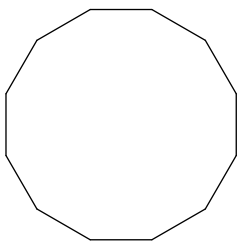
3) regular 21-gon

 162.9°

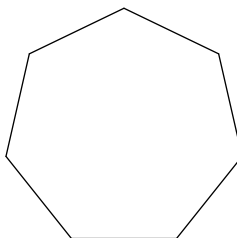
5)

 90°

7)

 150°

9)

 128.6°

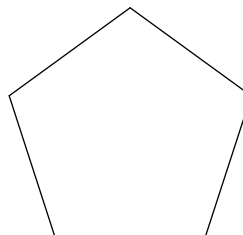
2) regular 18-gon

 160°

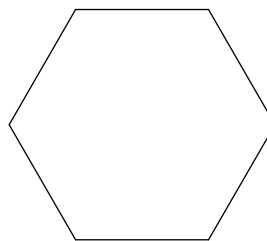
4) regular 25-gon

 165.6°

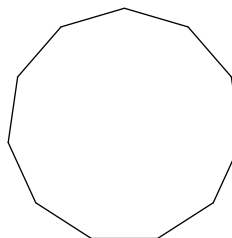
6)

 108°

8)

 120°

10)

 147.3°

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

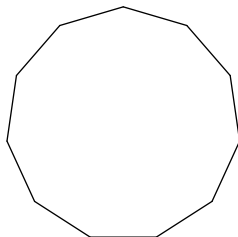
11) regular 21-gon

 3420°

13) regular 11-gon

 1620°

15)

 1620°

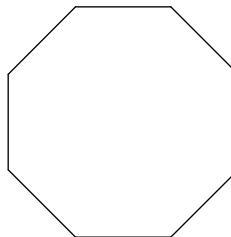
12) regular dodecagon

 1800°

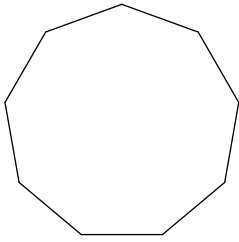
14) regular 22-gon

 3600°

16)

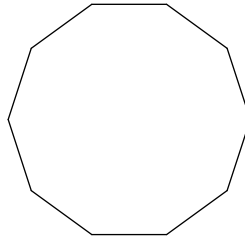
 1080°

17)



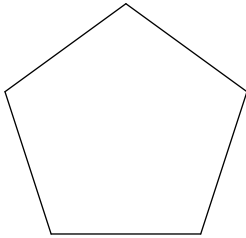
1260°

18)



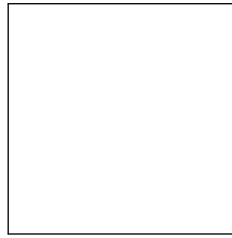
1440°

19)



540°

20)



360°

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

21) regular decagon

36°

22) regular 21-gon

17.1°

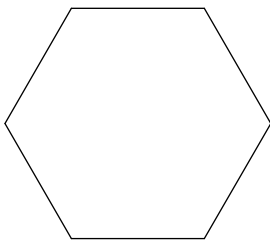
23) regular 22-gon

16.4°

24) regular pentagon

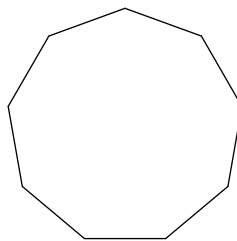
72°

25)



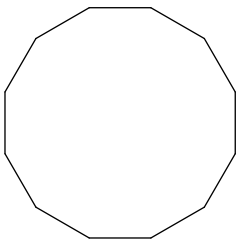
60°

26)



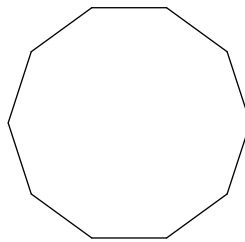
40°

27)



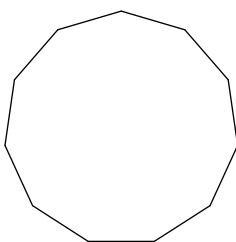
30°

28)



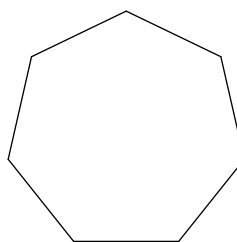
36°

29)



32.7°

30)



51.4°