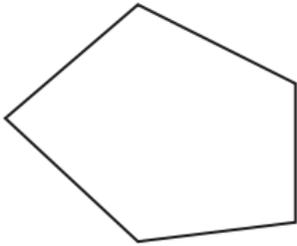


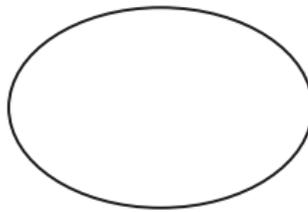
REVIEW—Polygons

This is the worksheet we were doing during the basketball tournaments.
YES or NO: Is each of these shapes a polygon?

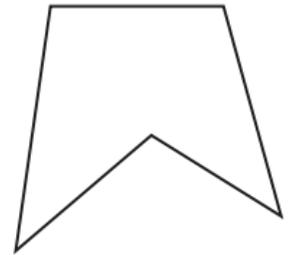
1)



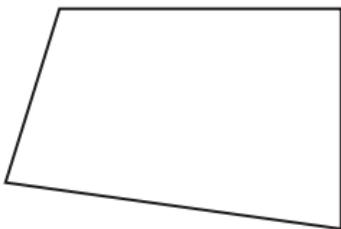
2)



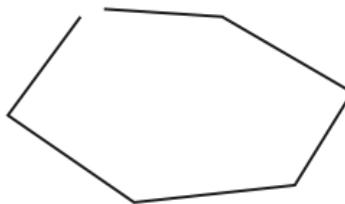
3)



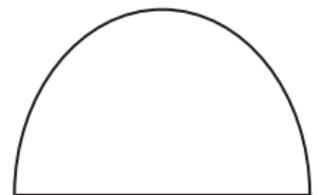
4)



5)



6)

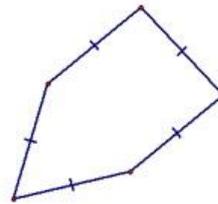


7. YES or NO: Is the polygon at right

_____ a. equilateral

_____ b. equiangular

_____ c. regular

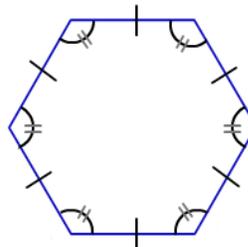


8. YES or NO: Is the polygon at right

_____ a. equilateral

_____ b. equiangular

_____ c. regular

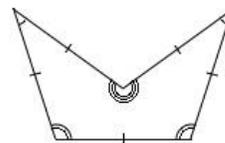


9. YES or NO: Is the polygon at right

_____ a. equilateral

_____ b. equiangular

_____ c. regular

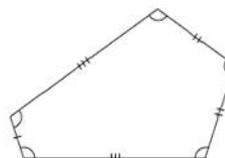


10. YES or NO: Is the polygon at right

_____ a. equilateral

_____ b. equiangular

_____ c. regular



11.

According to the Polygon Angle-Sum Theorem, what is the relationship between the number of sides of a polygon and the sum of the measures of the interior angles of a polygon?

_____ 12. What is the sum of the angles in a nonagon?

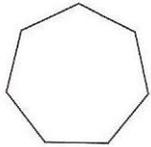
_____ 13. What is the sum of the angles in a 22-gon?

_____ 14. What is the sum of the angles in a hexagon?

_____ 15. What is the sum of the angles in a 53-gon?

Find the measure of **one** interior angle of each of these **regular** polygons.

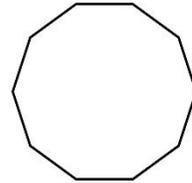
_____ 16.



_____ 17.



_____ 18.



_____ 19. A regular 15-gon

_____ 22. A regular dodecagon

_____ 20. A regular 60-gon

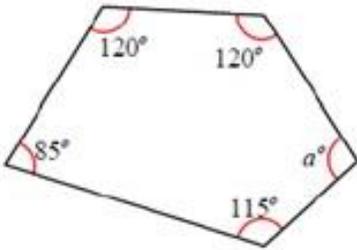
_____ 23. A regular triangle

_____ 21. A regular quadrilateral

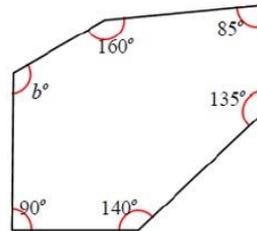
_____ 24. A regular triangle

Find the missing angles.

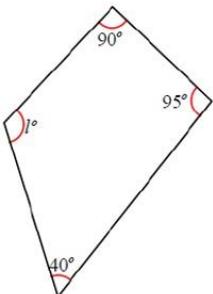
_____ 25.



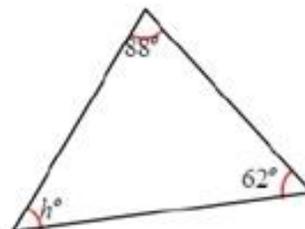
_____ 27.



_____ 26.



_____ 28.

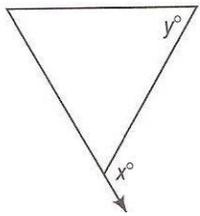


Find the measure of an **exterior angle** of each of these regular polygons.

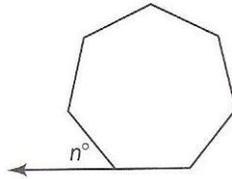
- | | | | |
|-----------|----------------------------|-----------|-----------------------|
| _____ 29. | Regular hexagon | _____ 33. | Regular quadrilateral |
| _____ 30. | Regular hectagon (100-gon) | _____ 34. | Regular octagon |
| _____ 31. | Regular pentagon | _____ 35. | Regular 182-gon |
| _____ 32. | Regular icosagon (20-gon) | | |

Regular polygons are shown in the pictures below.
Find the values of the angles shown.

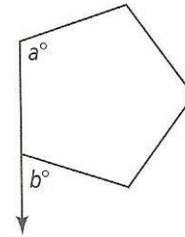
36.
 $x =$ _____
 $y =$ _____



37.
 $n =$ _____



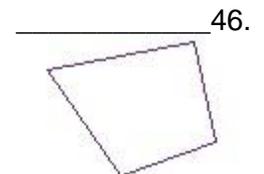
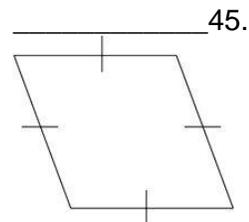
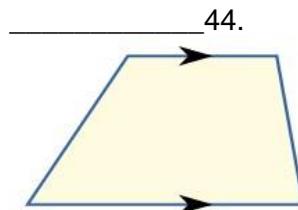
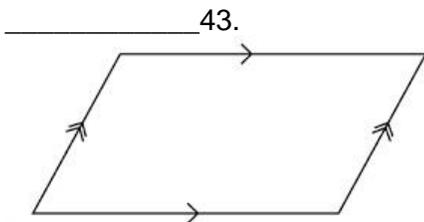
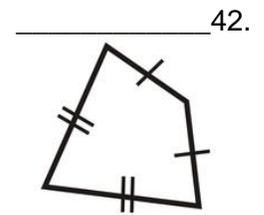
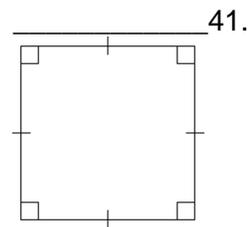
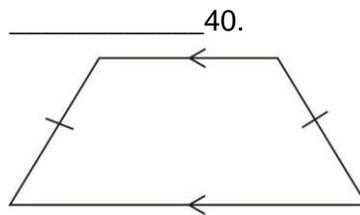
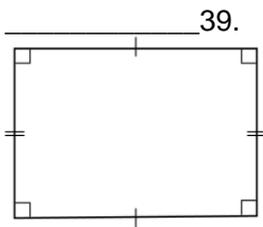
38.
 $a =$ _____
 $b =$ _____



Match the pictures below to the most specific name for each shape.

- A. Parallelogram
- B. Trapezoid
- C. Isosceles Trapezoid
- D. Square

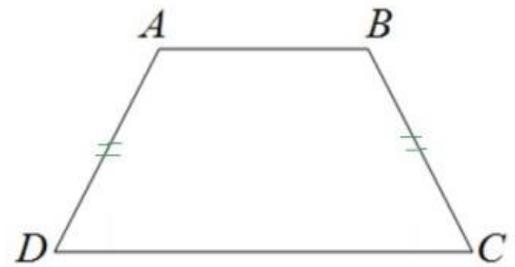
- E. Rhombus
- F. Kite
- G. Rectangle
- H. Quadrilateral



Use the shape at right for these questions.

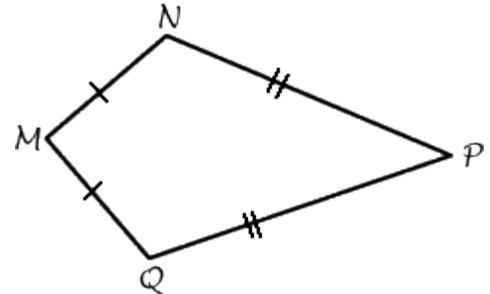
_____ and _____ 47. Name the two **bases**.

_____ and _____ 48. Name the two **legs**.



Use the shape at right for these questions.

_____ and _____ 49. Name the two **vertex angles**.

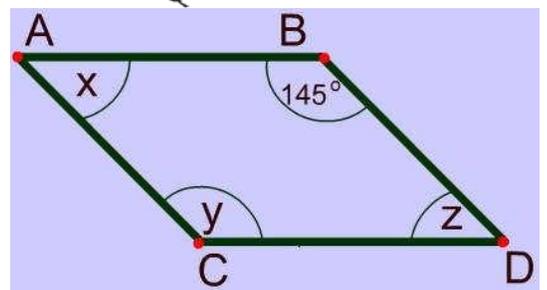


ABCD is a parallelogram.

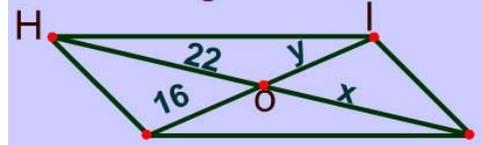
_____ 50. Find x .

_____ 51. Find y .

_____ 52. Find z .



Parallelogram HIJK



_____ 53. Find x in the picture at right.

_____ 54. Find y in the picture at right.

PQRS is a rhombus.

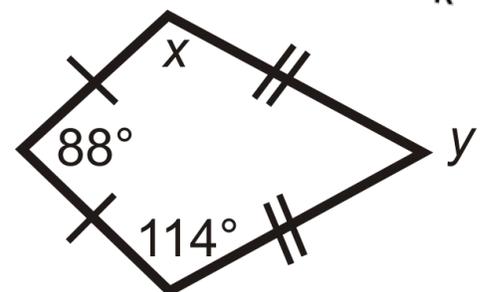
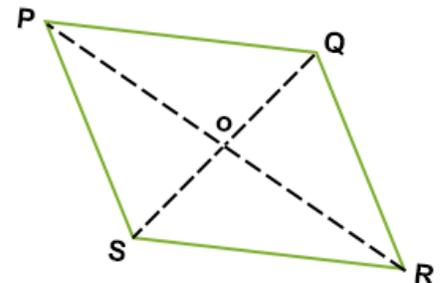
_____ 55. What is $m\angle POQ$?

_____ 56. If $PO = 17$, what is PR ?

_____ 57. If $m\angle PSR = 140$, what is $m\angle PSQ$?

_____ 58. Find x in the picture at right.

_____ 59. Find y (the measure of an angle) in the picture at right.

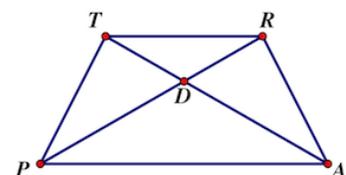


TRAP is an isosceles trapezoid.

_____ 60. If $TD = 5$, what is DR ?

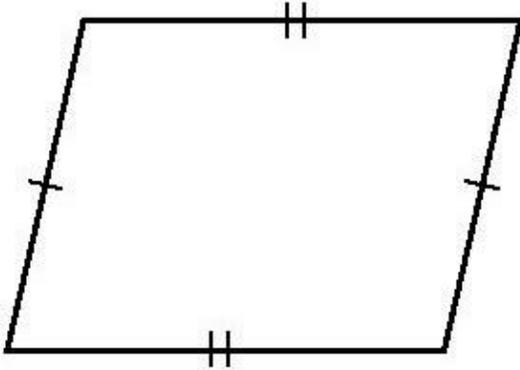
_____ 61. If $PR = 12$, what is TA ?

_____ 62. If $m\angle PAR = 70$, what is $m\angle RTP$?

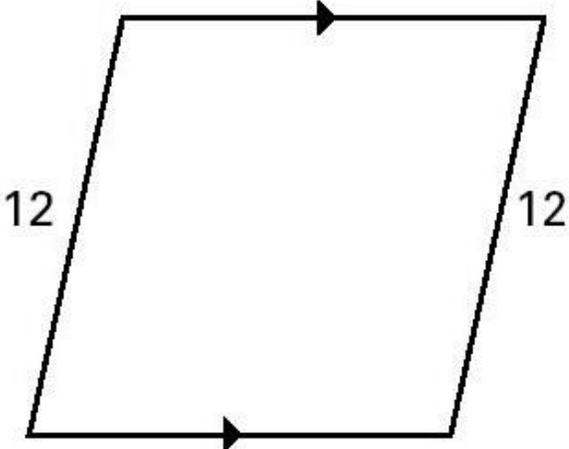


YES or NO: Is the information shown sufficient to prove these quadrilaterals are parallelograms?

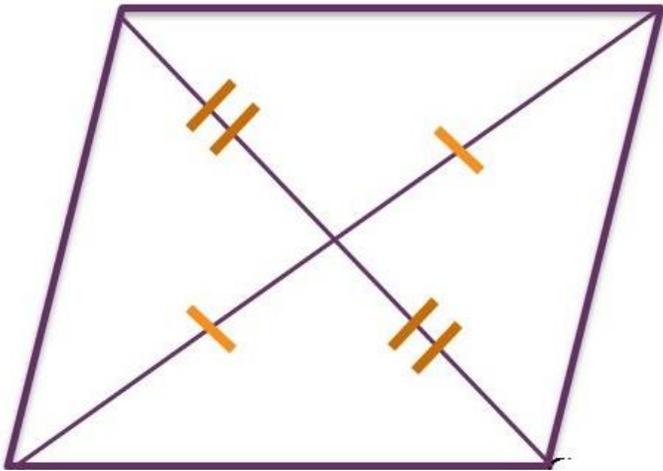
63.



66.



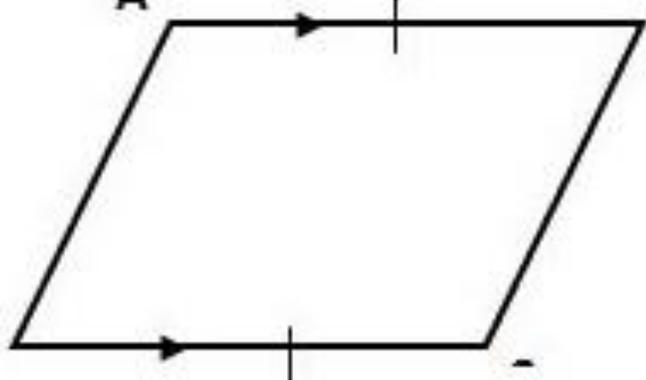
64.



67.



65.



68.

