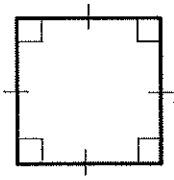
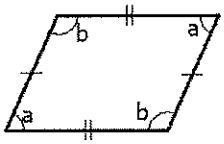
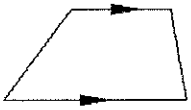
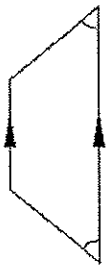
Quadrilaterals Review

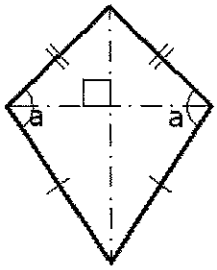
For numbers 1-6 classify the quadrilaterals in all ways possible.

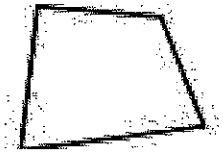
1.  square rectangle rhombus parallelogram

2.  parallelogram

3.  trapezoid

4.  isosceles trapezoid trapezoid

5.  kite

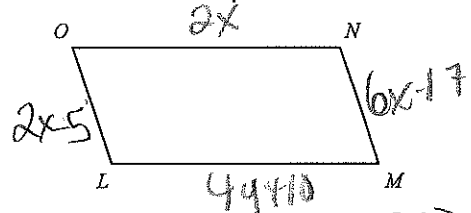
6.  quadrilateral

For numbers 7-13 determine if the statements are true or false.

7. All trapezoids are quadrilaterals T
8. All rectangles are squares F
9. All rhombi are parallelograms T
10. All parallelograms are rhombi F
11. All trapezoids are isosceles F
12. All kites are quadrilaterals T
13. All quadrilaterals are parallelograms. F

14. Choose three true statements above and draw a venn-diagram to represent the relationship

15. If LMNO is a parallelogram, OL = 2x-5, NM=6x-17, ON= 2x, and LM=4y+10 find the values of x and y.



$2x-5 = 6x-17$

$12 = 4x$

$3 = x$

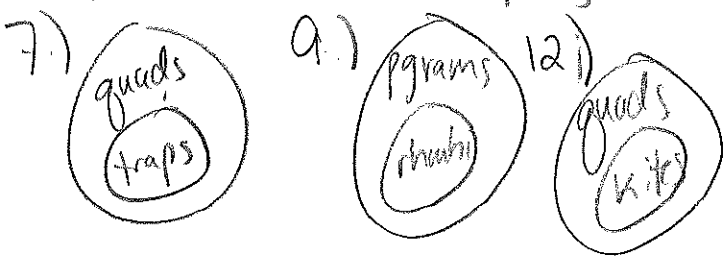
$2(3) = 4y+10$

$6 = 4y+10$

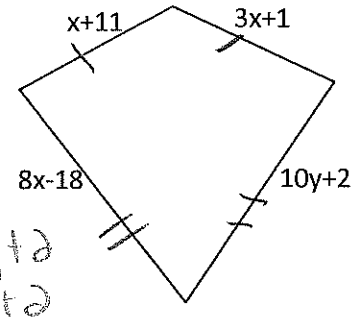
$-4 = 4y$

$-1 = y$

14) 7) 9) 12)



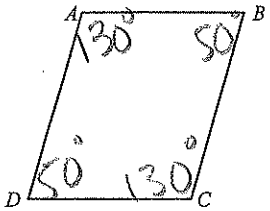
16. Find the values of x and y for the kite below.



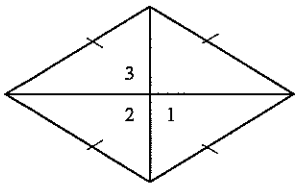
$x+11 = 3x+1$
$-2x = -10$
$x = 5$

$8(5) - 18 = 10y + 2$
$40 - 18 = 10y + 2$
$22 = 10y + 2$
$20 = 10y$
$2 = y$

17. If the measure of angle DAB is 130 degrees, find the remaining angle measures.



18. Find the variable values for x, y, and z for the following rhombus. $m\angle 1 = 9x$, $m\angle 2 = 3x + 10y$, $m\angle 3 = 15z$.

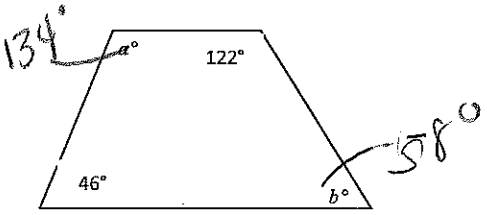


$\angle 1 = 90$
$90 = 9x$
$10 = x$

$\angle 2 = 90$
$90 = 3x + 10y$
$90 = 30 + 10y$
$60 = 10y$
$6 = y$

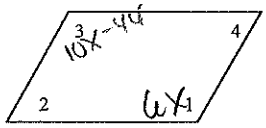
$\angle 3 = 90$
$90 = 15z$
$6 = z$

19. Find the angle measures. Note: the diagram is not isosceles.



$58°$

20. Find the value of x if $m\angle 1 = 6x$ and $m\angle 3 = 10x - 44$

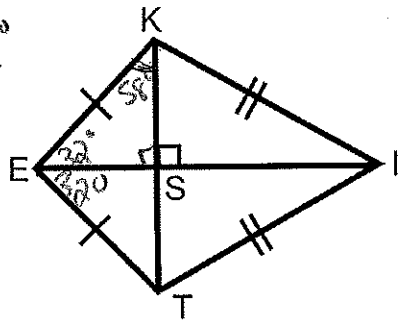


$6x = 10x - 44$
$-4x = -44$
$x = 11$

21. Find the measure of angle EKS, angle ESK and angle SEK in the kite given that angle TES is 32 degrees.

$58°$

$90°$ $32°$



22. Review – use the diagram below
    a. Name 3 collinear points A, G, & C
    b. Give another name for line AC. AG
    c. Name the plane in the diagram. AGE