

QUADRILATERAL REVIEW

DATE _____

BLOCK _____

I. Matching

- | | |
|------------------------------|---|
| _____ 1) trapezoid | A. polygon with 4 sides |
| _____ 2) parallelogram | B. segment joining a vertex with the midpoint of the opposite side |
| _____ 3) square | C. two sides that share a vertex |
| _____ 4) rhombus | D. quadrilateral with 2 parallel sides |
| _____ 5) rectangle | E. quadrilateral with 2 pairs of parallel sides |
| _____ 6) isosceles trapezoid | F. quadrilateral with 4 right angles |
| _____ 7) quadrilateral | G. quadrilateral with 4 equal sides |
| _____ 8) median of trapezoid | H. quadrilateral with 4 equal sides and 4 right angles |
| _____ 9) diagonal | I. segment joining 2 non-consecutive vertices |
| _____ 10) consecutive sides | J. quadrilateral with 1 pair of parallel sides and 2 congruent legs |
| | K. segment joining midpoints of 2 legs |

II. True or false. Use + for true and 0 for false.

- _____ 11) Every rhombus is a square
- _____ 12) Every square is a rectangle
- _____ 13) Every parallelogram is a trapezoid
- _____ 14) Every rectangle is a rhombus
- _____ 15) Every parallelogram is a rhombus
- _____ 16) Every rhombus is a parallelogram
- _____ 17) Opposite sides of a square are parallel
- _____ 18) A rectangle is a parallelogram with congruent diagonals
- _____ 19) The diagonals of a square are congruent
- _____ 20) The diagonals of a rhombus are always congruent

III. Check all quadrilaterals with the properties.

	Property	Parallel- ogram	Rectangle	Rhombus	Square
21)	Opposite sides are congruent				
22)	Diagonals are equal				
23)	Diagonals are perpendicular				
24)	4 equal sides				
25)	4 right angles				
26)	Diagonals bisect each other				

IV. Determine what kind of quadrilateral each of the following is. Be as specific as possible.

A. parallelogram

B. rectangle

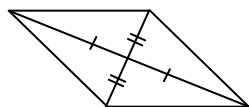
C. rhombus

D. square

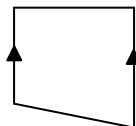
E. trapezoid

F. none of the above

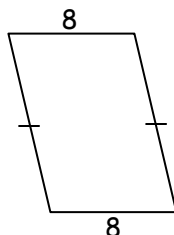
27) _____



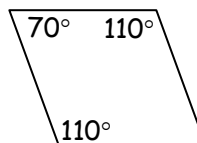
28) _____



29) _____



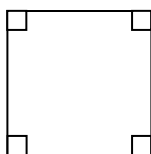
30) _____



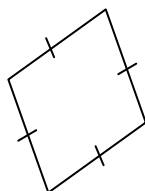
31) _____



32) _____



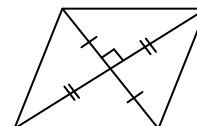
33) _____



34) _____



35) _____



V. Determine if each of the following is a parallelogram. If it is a parallelogram, give the reason why. If it is not, answer F.

A. both pairs of opposite sides are parallel

B. both pairs of opposite sides are congruent

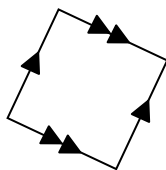
C. both pairs of opposite angles are congruent

D. one pair of sides is both parallel and congruent

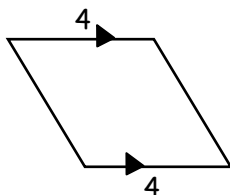
E. diagonals bisect each other

F. can't determine if the quadrilateral is a parallelogram

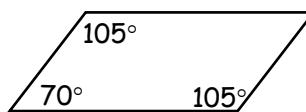
36) _____



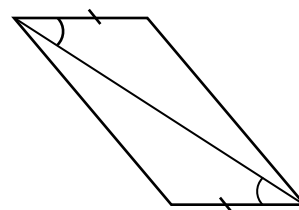
37) _____



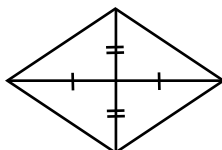
38) _____



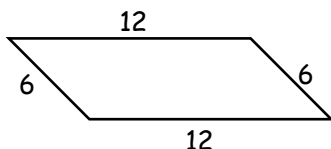
39) _____



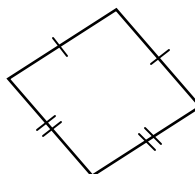
40) _____



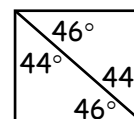
41) _____



42) _____



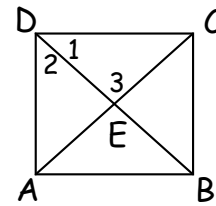
43) _____



VI.

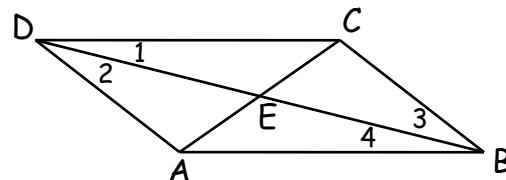
44) ABCD is a square

- a) $m\angle 3 =$ _____ d) if $AC = 10$, $DE =$ _____
 b) $m\angle 1 =$ _____ e) $m\angle ABC =$ _____
 c) if $AB = 6$, $AD =$ _____ f) if $AC = 8$, $BD =$ _____



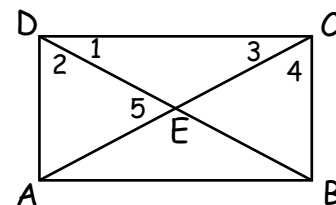
45) ABCD is a parallelogram

- a) if $m\angle 1 = 60^\circ$, $m\angle 4 =$ _____
 b) if $m\angle DAB = 120^\circ$, $m\angle ABC =$ _____
 c) if $AC = 20$, $EC =$ _____
 d) if $AD = 4x - 5$ and $BC = 3x + 2$, then $x =$ _____
 e) if $m\angle 1 = 40^\circ$ and $m\angle 2 = 35^\circ$, then $m\angle DAB =$ _____



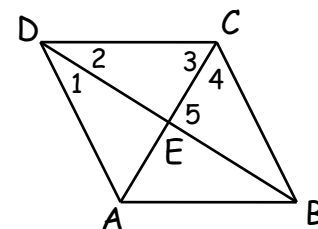
46) ABCD is a rectangle

- a) $m\angle ABC =$ _____ b) if $m\angle 1 = 40^\circ$, $m\angle 3 =$ _____
 c) if $m\angle 1 = 35^\circ$, $m\angle 2 =$ _____ d) if $AC = 12$, $DE =$ _____
 e) if $m\angle 1 = 36^\circ$, $m\angle 5 =$ _____



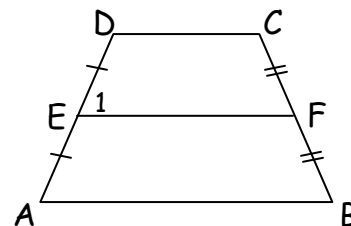
47) ABCD is a rhombus

- a) $m\angle 5 =$ _____ b) if $m\angle 1 = 43^\circ$, $m\angle 2 =$ _____
 c) if $m\angle 1 = 40^\circ$, $m\angle 3 =$ _____ d) if $AC = 20$, $AE =$ _____
 e) if $BE = 4$, $ED =$ _____



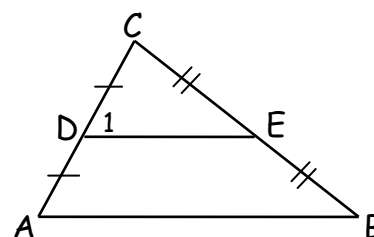
48) ABCD is an isosceles trapezoid

- a) if $m\angle 1 = 60^\circ$, $m\angle A =$ _____
 b) if $AD = 4x - 6$ and $CB = 2x + 8$, then $x =$ _____
 c) if $AD = 3x + 4$ and $BC = 4x - 6$, then $x =$ _____
 d) if $CD = 10$ and $AB = 16$, then $EF =$ _____
 e) if $EF = 15$ and $DC = 8$, then $AB =$ _____



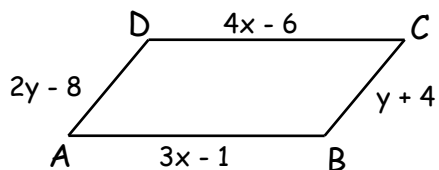
49) Given $\triangle ABC$ with midpoints D and E

- a) if $AB = 20$, $DE =$ _____
 b) if $DE = 18$, $AB =$ _____
 c) if $m\angle 1 = 81^\circ$, $m\angle A =$ _____



VII. Find the missing values.

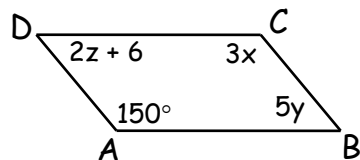
50) parallelogram



$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}}$$

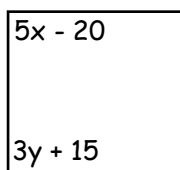
$$AB = \underline{\hspace{2cm}} \quad AD = \underline{\hspace{2cm}}$$

51) parallelogram



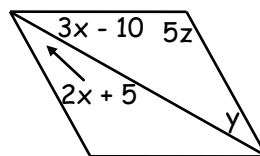
$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad z = \underline{\hspace{2cm}}$$

52) square



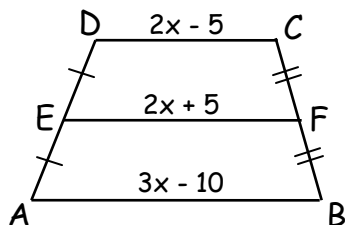
$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}}$$

53) rhombus



$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad z = \underline{\hspace{2cm}}$$

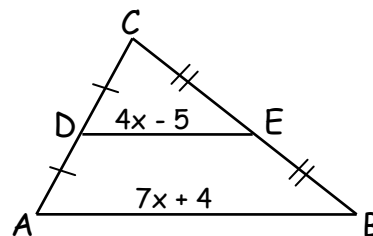
54)



$$x = \underline{\hspace{2cm}} \quad CD = \underline{\hspace{2cm}}$$

$$AB = \underline{\hspace{2cm}} \quad EF = \underline{\hspace{2cm}}$$

55)



$$x = \underline{\hspace{2cm}} \quad DE = \underline{\hspace{2cm}}$$

$$AB = \underline{\hspace{2cm}}$$