

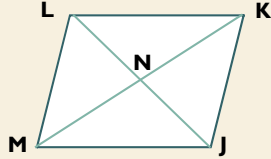
6.2/6.3 REVIEW

DAY 5

GIVEN JKLM IS A .
KN = 13.5 LM = 17 \angle KJM = 102°

FIND...

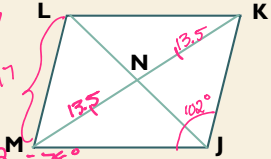
- KM
- KJ
- MN
- $m\angle$ JKL
- $m\angle$ KLM



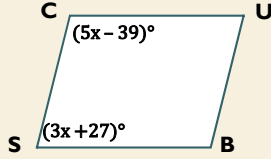
GIVEN JKLM IS A .
KN = 13.5 LM = 17 \angle KJM = 102°

FIND...

- $KM = 2(13.5) = 27$
- $KJ = 17$
- $MN = 13.5$
- $m\angle$ JKL = $180 - 102 = 78^\circ$
- $m\angle$ KLM = 102°



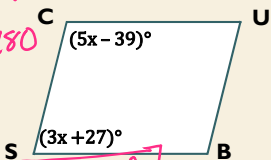
GIVEN CUBS IS A
FIND $m\angle$ C AND $m\angle$ U



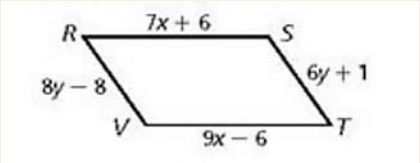
GIVEN CUBS IS A
FIND $m\angle$ C AND $m\angle$ U
** consecutive angles are supplementary*

$5x - 39 + 3x + 27 = 180$
 $8x - 12 = 180$
 $8x = 192$
 $x = 24$

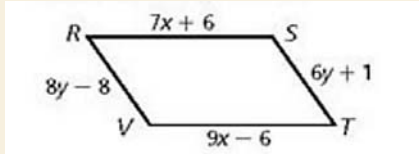
$\angle C = 81^\circ$
 $\angle S = 99^\circ$



WHICH VALUES OF X AND Y SHOW THAT RSTV IS A



WHICH VALUES OF X AND Y SHOW THAT RSTV IS A  *Opp. sides are \cong



$$7x + 6 = 9x - 6$$

$$12 = 2x$$

$$6 = x$$

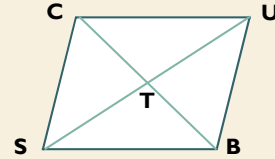
$$8y - 8 = 6y + 1$$

$$2y = 9$$

$$y = 4.5$$

GIVEN CUBS IS A 

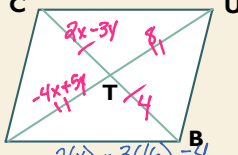
CT = $(2x - 3y)$
 TB = 4
 ST = $(-4x + 5y)$
 UT = 8
 FIND X AND Y



GIVEN CUBS IS A 

*Need two equations!
 Diagonals bisect each other

CT = $(2x - 3y)$
 TB = 4
 ST = $(-4x + 5y)$
 UT = 8



$(2x - 3y = 4) \rightarrow 4x - 6y = 8$
 $(-4x + 5y = 8) \rightarrow -4x + 5y = 8$
 $-y = 16$
 $y = 16$

$2(x) - 3(16) = 4$
 $2x + 48 = 4$
 $x = -22$

DETERMINE IF THE FOLLOWING IS A PARALLELOGRAM.
 USE PROPERTIES TO SAY WHY/WHY NOT.

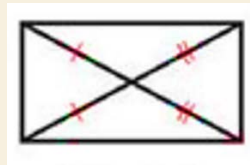


DETERMINE IF THE FOLLOWING IS A PARALLELOGRAM.
 USE PROPERTIES TO SAY WHY/WHY NOT.

yes!
 Both pairs of opposite sides are \parallel

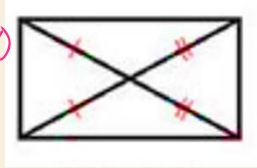


DETERMINE IF THE FOLLOWING IS A PARALLELOGRAM.
 USE PROPERTIES TO SAY WHY/WHY NOT.

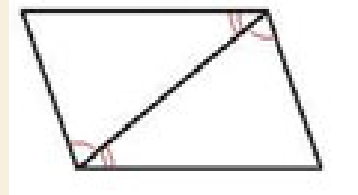


DETERMINE IF THE FOLLOWING IS A PARALLELOGRAM. USE PROPERTIES TO SAY WHY/WHY NOT.

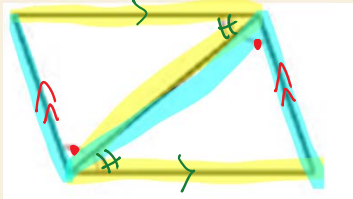
NO!
Diagonals DO NOT bisect each other



IS THE FIGURE BELOW A PARALLELOGRAM? USE PROPERTIES TO SAY WHY/WHY NOT

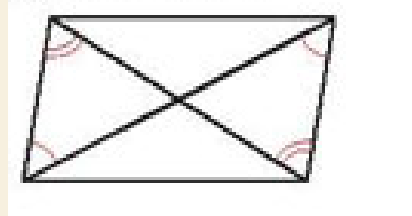


IS THE FIGURE BELOW A PARALLELOGRAM? JUSTIFY WITH MARKINGS.

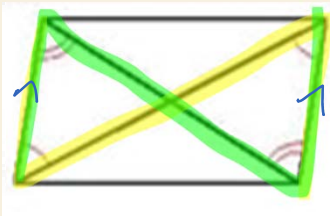


yes!
Both pairs of opp. sides are //

IS THE FIGURE BELOW A PARALLELOGRAM? JUSTIFY WITH MARKINGS.

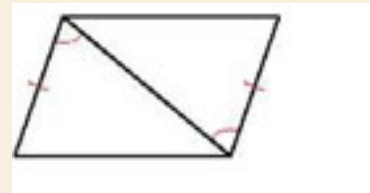


IS THE FIGURE BELOW A PARALLELOGRAM? JUSTIFY WITH MARKINGS.

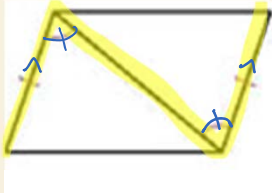


NO! only one pair of opp. sides //

IS THE FIGURE BELOW A PARALLELOGRAM? JUSTIFY WITH MARKINGS.



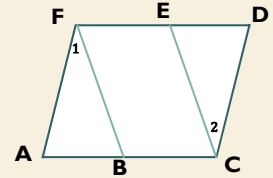
IS THE FIGURE BELOW A PARALLELOGRAM? JUSTIFY WITH MARKINGS.



yes!
1 pair of opp. sides are \cong + \parallel

WRITE A TWO-COLUMN PROOF:

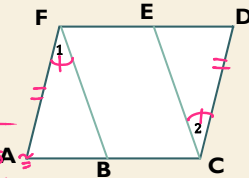
Given: $ACDF$ is a parallelogram
 $\angle 1 \cong \angle 2$



Prove: $\overline{FB} \cong \overline{EC}$

WRITE A TWO-COLUMN PROOF:

Given: $ACDF$ is a parallelogram
 $\angle 1 \cong \angle 2$

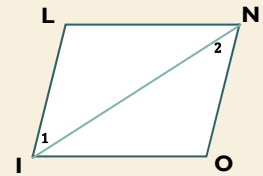


Prove: $\overline{FB} \cong \overline{EC}$ Reasons

- | | |
|---------------------------------------|---|
| ① $ACDF$ is \square | ① Given |
| ② $FA \cong DC$ | ② if $\square \rightarrow$ opp. sides \cong |
| ③ $\angle A \cong \angle D$ | ③ if $\square \rightarrow$ opp. \angle 's \cong |
| ④ $\triangle AFB \cong \triangle DEC$ | ④ ASA |
| ⑤ $\overline{FB} \cong \overline{EC}$ | ⑤ CPCTC |

WRITE A TWO-COLUMN PROOF:

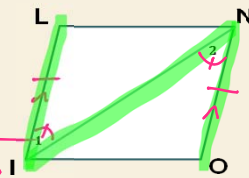
Given: $\angle 1 \cong \angle 2$
 $\overline{LI} \cong \overline{ON}$



Prove: $LION$ is a parallelogram

WRITE A TWO-COLUMN PROOF:

Given: $\angle 1 \cong \angle 2$
 $\overline{LI} \cong \overline{ON}$



Prove: $LION$ is a parallelogram

- | | |
|---------------------------------------|--|
| ① $\angle 1 \cong \angle 2$ | ① Given |
| ② $\overline{LI} \cong \overline{ON}$ | ② if alt. int. \angle 's \cong then \parallel lines |
| ③ $\overline{LI} \cong \overline{ON}$ | ③ Given |
| ④ $LION$ is \square | ④ if one pair of opp. sides are \cong and \parallel then \square |