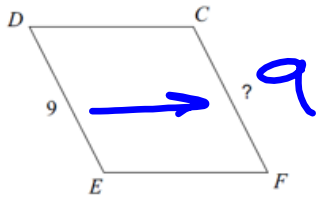
No Bell Ringer

Feb 13-8:12 AM

7A & 7B Review

Find the measurement indicated in each parallelogram.

1.



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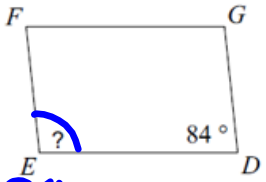
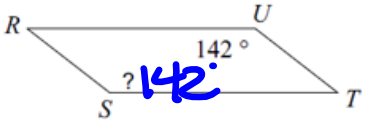
2.



180−84=96°

3.



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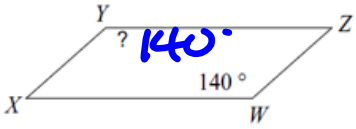

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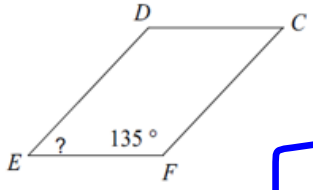
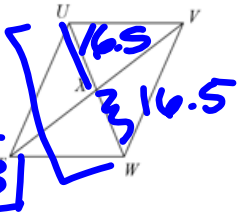


6.

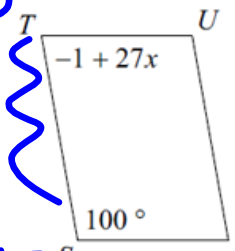
$UX = 16.5$
Find UW



UW=33

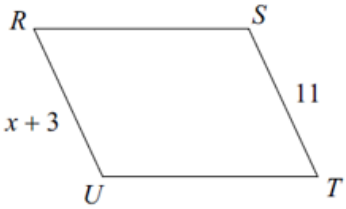
Solve for the variable. Each figure is a Parallelogram.

7.



−1+27x+100=180

8.



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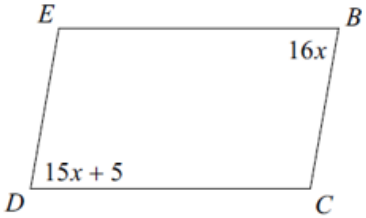
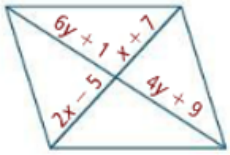


10. −1+27x=80 27x=81 x=3



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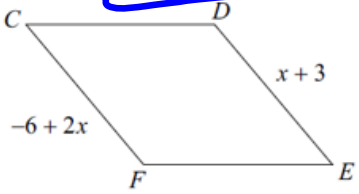

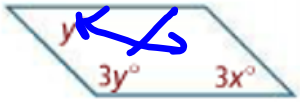

y+3y=180

4y=180

y=45

45=3x

x=15

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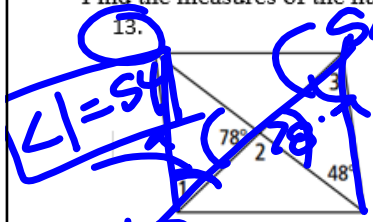
Find the measures of the numbered angles for each parallelogram.

13.



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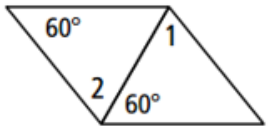

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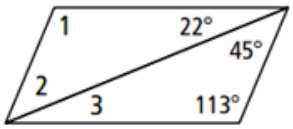
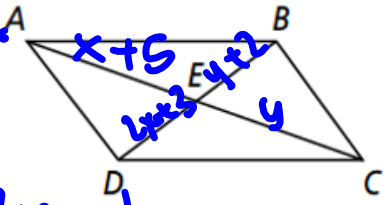


Find the values for x and y in $\square ABCD$

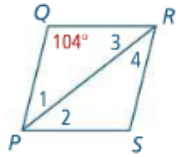
16. $AE = x + 5$, $EC = y$, $DE = 2x+3$, $EB = y + 2$



17. $AE = 3x$, $EC = 2y - 2$, $DE = 5x$, $EB = 2y + 2$

Find the measures of the numbered angles in each rhombus.

18.



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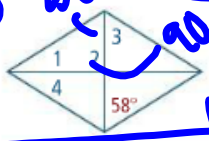

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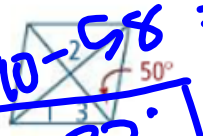

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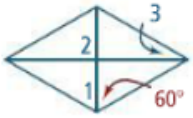
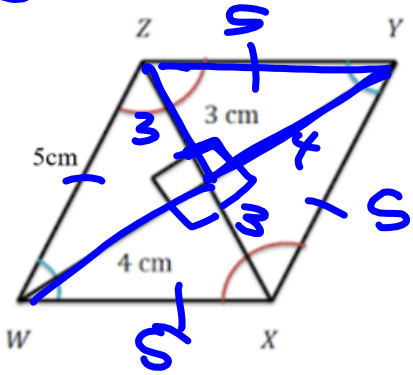


22. Find the given lengths in the rhombus below.



a) $\overline{ZY}$ = _____

b) $\overline{XZ}$ = _____

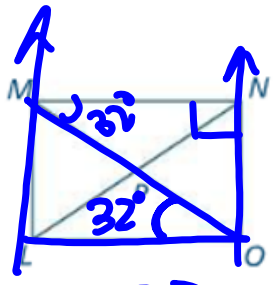
c) $\overline{WY}$ = _____

d) $\overline{WX}$ = _____

LMNO is a rectangle. Find the following.
For 23 and 24. Find the value of x and the length of each diagonal.

23. $LN = 5x - 8$ and $MO = 2x + 1$

24. $LN = 3x + 1$ and $MO = 8x - 4$



25. Find the measure of $\angle M$ _____

26. Given the measure of $\angle NMO$ is 32^0.

a) Find the measure of $\angle LMO$ 58°

b) Find the measure of $\angle LOM$ 32°

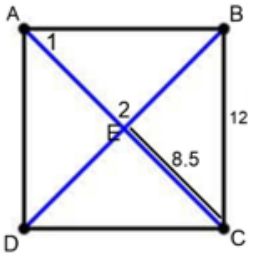
27. ABCD is a square.

a) Find the measure of angle 2.

b) Find the measure of angle 1.

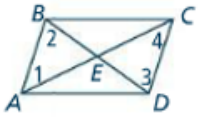
c) Find the length of side AB.

d) Find the length of DB.



28.

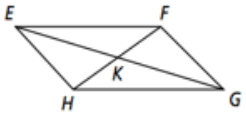
Given: $\square ABCD$
Prove: $\overline{AC}$ and $\overline{BD}$ bisect each other at E.



Statements	Reasons
1) $ABCD$ is a parallelogram.	1) Given
2) $\overline{AB} \parallel \overline{DC}$	2) a. _____
3) $\angle 1 \cong \angle 4; \angle 2 \cong \angle 3$	3) b. _____
4) $\overline{AB} \cong \overline{DC}$	4) c. _____
5) d. _____	5) ASA
6) $\overline{AE} \cong \overline{CE}; \overline{BE} \cong \overline{DE}$	6) e. _____
7) f. _____	7) Definition of bisector

29. Complete this two column proof:

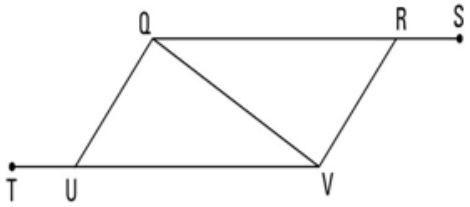
Given: $\square EFGH$, with diagonals $\overline{EG}$ and $\overline{HF}$
Prove: $\triangle EFK \cong \triangle GHK$



Statements	Reason
1.	Given
2.	The diagonals of a parallelogram bisect each other.
$\overline{EF} \cong \overline{GH}$	4.
3.	5.

30. Given: $\angle UQV \cong \angle RVQ$
$\angle TUQ \cong \angle SRV$

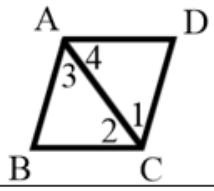
Prove: $QRVU$ is a parallelogram



Statement	Reason
1. $\angle UQV \cong \angle RVQ \quad \angle TUQ \cong \angle SRV$	1.
2. $m\angle TUQ + m\angle QUV = 180^\circ$ $m\angle SRV + m\angle QRV = 180^\circ$	2.
3. $m\angle TUQ + m\angle QUV = m\angle SRV + m\angle QRV$	3.
4. $m\angle TUQ + m\angle QUV = m\angle TUQ + m\angle QRV$	4.
5. $m\angle QUV \cong m\angle QRV$	5.
6. $\overline{QV} \cong \overline{QV}$	6.
7. $\Delta UQV \cong \Delta RVQ$	7.
8. $\overline{UQ} \cong \overline{RV}, \quad \overline{UV} \cong \overline{RQ}$	8.
9. $QRVU$ is a parallelogram	9.

31. Given: $ABCD$ is a parallelogram
$\overline{AC}$ bisects $\angle BAD$ and $\angle BCD$

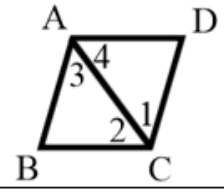
Prove: $ABCD$ is a rhombus



Statement	Reason
1. $\overline{AC}$ bisects $\angle BAD$ and $\angle BCD$	1.
2. $\angle 1 \cong \angle 2$ and $\angle 3 \cong \angle 4$	2.
3. $\overline{AC} \cong \overline{AC}$	3.
4. $\Delta ABC \cong \Delta ADC$	4.
5. $\overline{AB} \cong \overline{AD}$ and $\overline{BC} \cong \overline{CD}$	5.
6. $ABCD$ is a parallelogram	6.
7. $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \cong \overline{AD}$	7.
8. $\overline{AB} \cong \overline{AD} \cong \overline{BC} \cong \overline{CD}$	8.
9. $ABCD$ is a rhombus	9.

32. Given: $ABCD$ is a rhombus

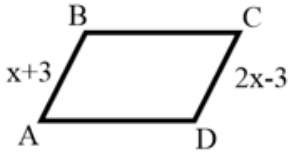
Prove: $\overline{AC}$ bisects $\angle BAD$ and $\angle BCD$



Statement	Reason
1. $ABCD$ is a rhombus	1.
2. $\overline{AB} \cong \overline{AD} \cong \overline{CB} \cong \overline{CD}$	2.
3. $\overline{AC} \cong \overline{AC}$	3.
4. $\Delta ABC \cong \Delta ADC$	4.
5. $\angle 3 \cong \angle 4$ and $\angle 2 \cong \angle 1$	5.
6. $\overline{AC}$ bisects $\angle BAD$ and $\angle BCD$	6.

33. Given: $ABCD$ is a parallelogram

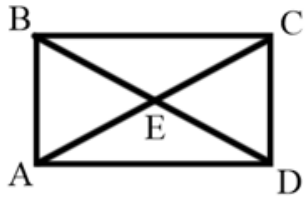
Prove: $x = 6$



Statement	Reason
1. $ABCD$ is a parallelogram	1.
2. $\overline{AB} \cong \overline{DC}$	2.
3. $AB = DC$	3.
4. $x+3 = 2x-3$	4.
5. $3 = x-3$	5.
6. $6 = x$	6.
7. $x = 6$	7.

34. Given: $ABCD$ is a rectangle
$AC = 7y - 19$
$BD = 5y + 1$

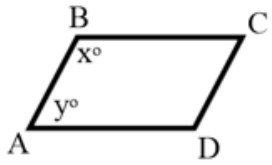
Prove: $y = 10$



Statement	Reason
1. $ABCD$ is a rectangle	1.
2. $\overline{AC} \cong \overline{BD}$	2.
3. $AC = BD$	3.
4. $AC = 7y - 19,\ BD = 5y + 1$	4.
5. $7y - 19 = 5y + 1$	5.
6. $2y - 19 = 1$	6.
7. $2y = 20$	7.
8. $y = 10$	8.

35. Given: $\angle A \cong \angle C$ and $\angle B \cong \angle D$

Prove: $ABCD$ is a parallelogram



Statement	Reason
1. $\angle A \cong \angle C$ and $\angle B \cong \angle D$	1.
2. $m\angle A + m\angle B + m\angle C + m\angle D = 360^\circ$	2.
3. $x + y + x + y = 360^\circ$	3.
4. $2x + 2y = 360^\circ$	4.
5. $x + y = 180^\circ$	5.
6. $\angle A$ and $\angle B$ are supplementary $\angle A$ and $\angle D$ are supplementary	6.
7. $\overline{AD} \parallel \overline{BC}$ and $\overline{AB} \parallel \overline{DC}$	7.
8. $ABCD$ is a parallelogram	8.