Questions on 5.8 HW?

Feb 7-1:05 PM

SM2 - Module 5 SE.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools SM2 - Module 5 SE... ×

45 / 47 125%

Topic: Are you ready for a test on module 5?

Figure 1 has been rotated 180º about the midpoint in side BC to form figure 2. Figure 1 was then translated to the right to form figure 3.

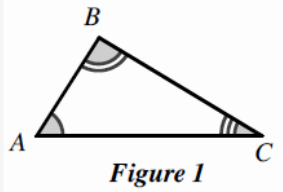


Figure 1

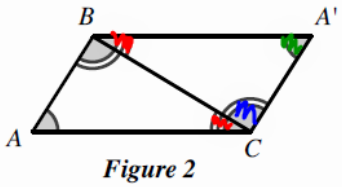


Figure 2

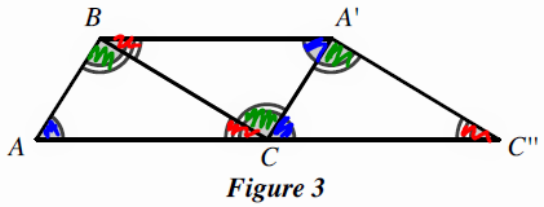


Figure 3

1. Use figure 3 to explain how you know the exterior angle $\angle B'CC''$ is equal to the sum of the 2 remote interior angles $\angle BAC$ *and* $\angle ABC$.

2. Use figure 3 to explain how you know the sum of the angles in a triangle is always 180º.

It shows all 3 ∠s in the triangle making a straight angle (180°).

3. Use figure 2 to explain how you know the sum of the angles in a quadrilateral is always 360º.

4. Use figure 2 to explain how you know that the opposite angles in a parallelogram are congruent.

8.50 x 11.00 in

Feb 9-7:58 AM

SM2 - Module 5 SE.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

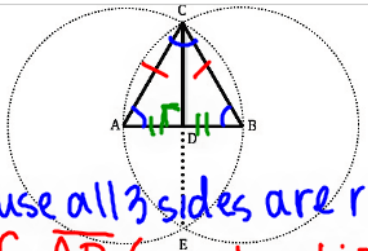
Home Tools SM2 - Module 5 SE... ×

46 / 47 125%

Topic: Writing proofs

3. Prove that $\overline{CD}$ is an altitude of ΔABC.

Use the diagram and ~~write a 2 column proof.~~ explain why



ΔABC is an equilateral and equiangular (all 60° $\angle$s). Because all 3 sides are radii of $\odot$s. $\overline{CE}$ has to be a $\perp$ bisector of $\overline{AB}$ (construction) so $\overline{CE} \perp \overline{AB}$ and $\overline{CE}$ is an altitude.

9. Use the diagram to prove that ΔABC is an isosceles triangle. (Choose your style.)

10. Use the diagram to prove that $m\angle A \cong m\angle B$. (Choose your style.)

Go

Topic: The algebra of parallelograms

8.50 x 11.00 in

SM2 - Module 5 SE.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools SM2 - Module 5 SE... ×

46 / 47 125%

Topic: The algebra of parallelograms

Use what you know about triangles and parallelograms to find each measure.

11. $\overline{XZ}$ = 24+24=48 m

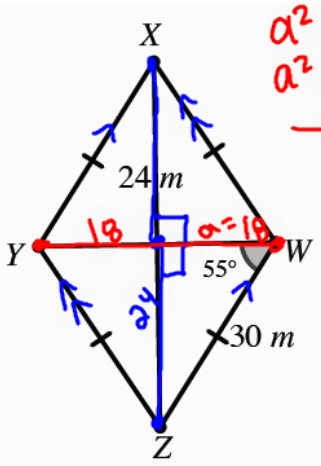
12. $m\angle XYZ$

13. $m\angle XYW$

14. $\overline{YX}$

15. $m\angle YXZ$

16. $\overline{YW}$ = 18+18=36m



$a^2 + 24^2 = 30^2$

$a^2 + 576 = 900$

$-576 \quad -576$

$\sqrt{a^2} = \sqrt{324}$

$a = 18$

8.50 x 11.00 in

Feb 9-8:11 AM

SM2 - Module 5 SE.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools SM2 - Module 5 SE... ×

47 / 47 125%

17. $\overline{LG}$

18. $\overline{HF}$

19. $m\angle EHG$

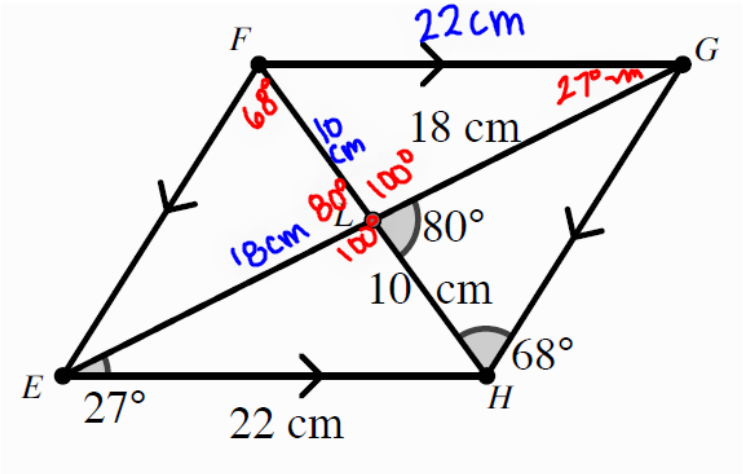
20. $m\angle FEH$

21. $m\angle ELF$

22. $\overline{FG}$

23. $\overline{EG}$

24. $m\angle FGE$



8.50 x 11.00 in

Feb 9-8:15 AM

Illuminate Benchmark Quiz

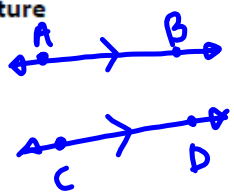
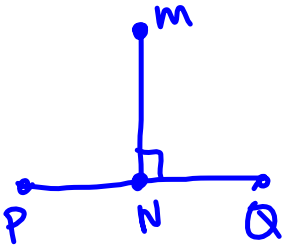
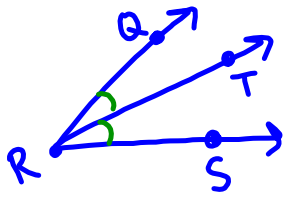
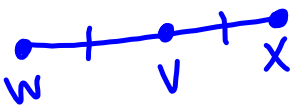
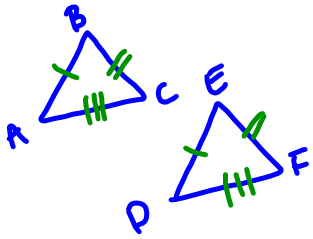
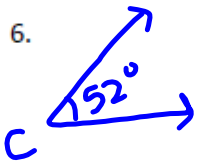
-for participation points-

Feb 7-2:08 PM

SECONDARY MATH II
Module 5 Study Guide: Geometric Figures

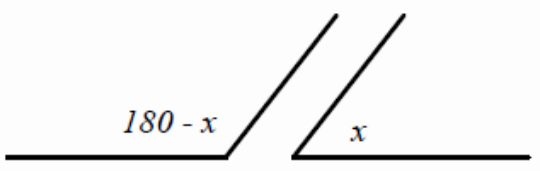
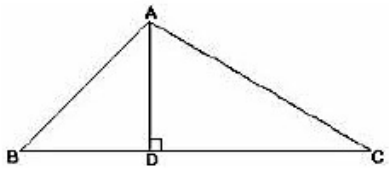
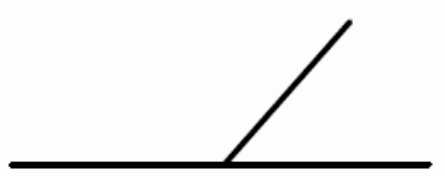
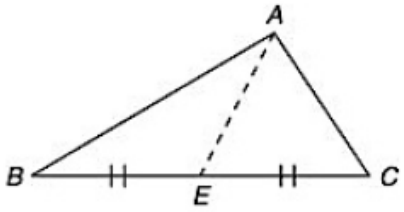
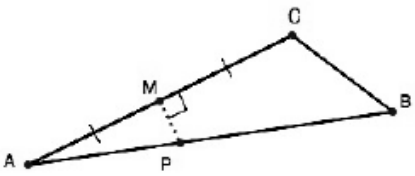
Directions: Show ALL work.

Using the proper symbolic notation, translate the statement into symbols AND draw a picture that is labeled correctly.

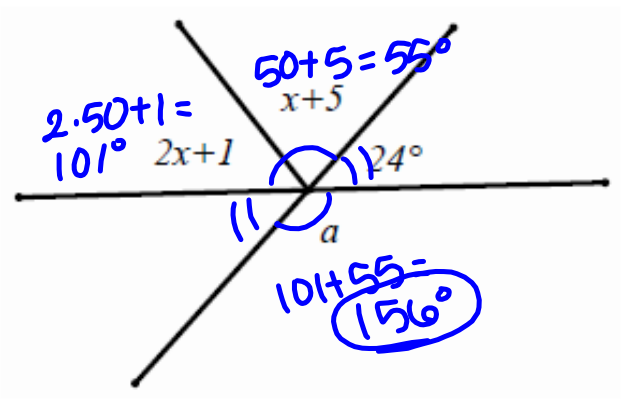
	Statement	Symbolic Notation	Picture
1.	Line AB is parallel to line CD.	1. $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$	1. 
2.	Line segment MN is perpendicular to line segment PQ.	2. $\overline{MN} \perp \overline{PQ}$	2. 
3.	Ray RT bisects angle QRS.	3. $\overrightarrow{RT}$ bisects $\angle QRS$	3. 
4.	Point V bisects line segment WX.	4. V bisects $\overline{WX}$	4. 
5.	Triangle ABC is congruent to triangle DEF.	5. $\triangle ABC \cong \triangle DEF$	5. 
6.	The measure of angle C is equal to 52°.	6. $m\angle C = 52°$	6. 

Feb 7-1:06 PM

Match each word/concept on the left with the picture depicting that word/concept that word/concept on the right.

C 7. Linear Pair	a. 
A 8. Supplementary Angles	b. 
B 9. Altitude	c. 
D 10. Median	d. 
E 11. Perpendicular bisector of a side	e. 

12. Find the measure of a in the diagram below



$2x+1+x+5+24=180$

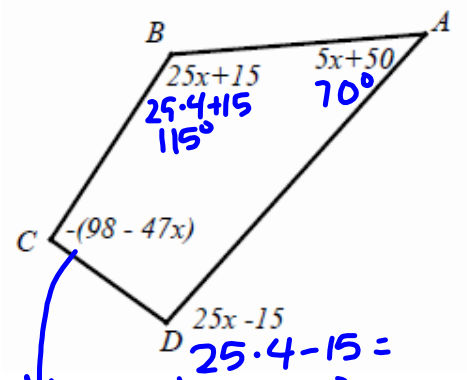
$3x+30=180$

$-30 \quad -30$

$\frac{3x}{3}=\frac{150}{3}$

$x=50$

13. Find the measure of all of the angles for the quadrilateral below.



$25x+15+5x+50+25x-15+-(98-47x)=360$

$55x+50-98+47x=360$

$102x-48=360$

$+48 \quad +48$

$\frac{102x}{102}=\frac{408}{102}$

$x=4$

$25\cdot4+15=115°$

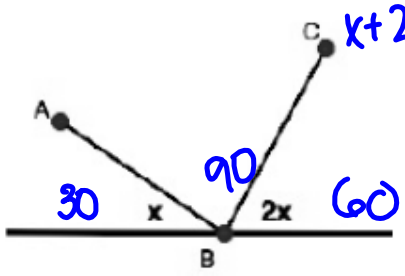
$25\cdot4-15=85°$

$-(98-47\cdot4)=$

$-(98-188)=90°$

14. Find the measure of the missing angle.

15. Given $m\angle ABC = 90°$, what does x equal?



$x+2x+90=180$

16. Given the following sides, sketch the triangles, write a congruence statement, and decide what triangle congruence pattern (ASA, SSS, or SAS) allows you to say those triangles are congruent.

$\overline{CY} \cong \overline{RP}, \overline{EY} \cong \overline{BP}, \angle Y \cong \angle P$

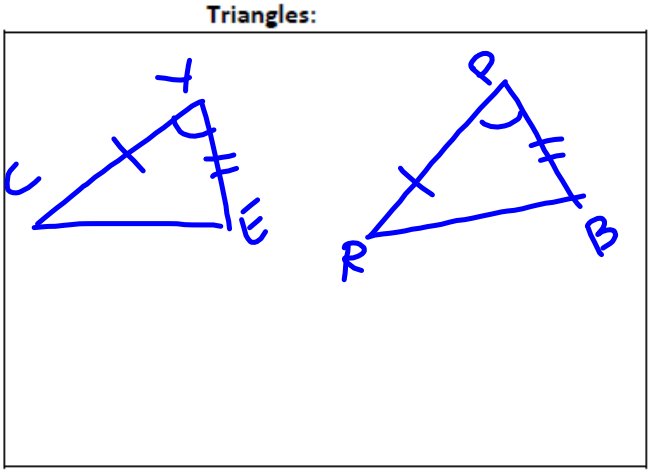
Congruence Statement:

$\triangle CYE \cong \triangle RPB$

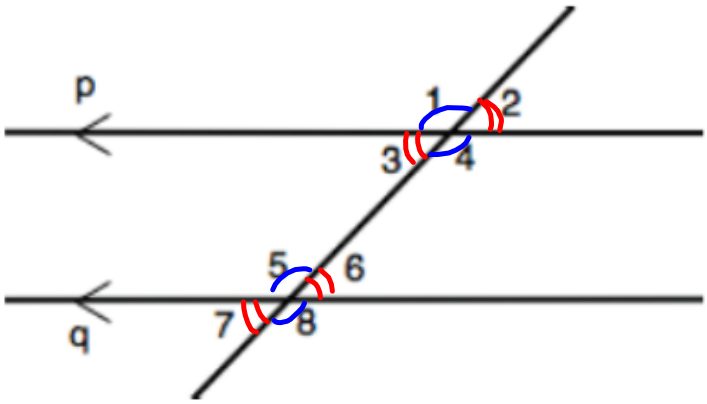
Congruence Pattern:

SAS

Triangles:



List each pair of angles as congruent or supplementary, given that lines p and q are parallel.



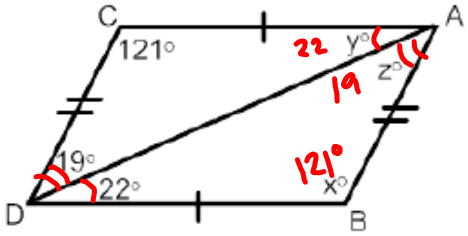
17. $\angle 1$ *and* $\angle 2$ supp

18. $\angle 1$ *and* $\angle 4$ congruent

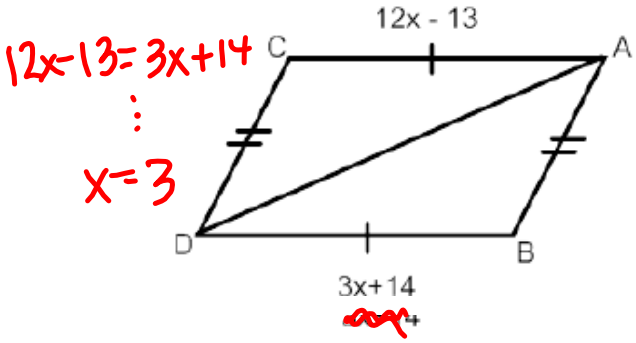
19. $\angle 4$ *and* $\angle 6$ supp

20. $\angle 2$ *and* $\angle 8$ supp

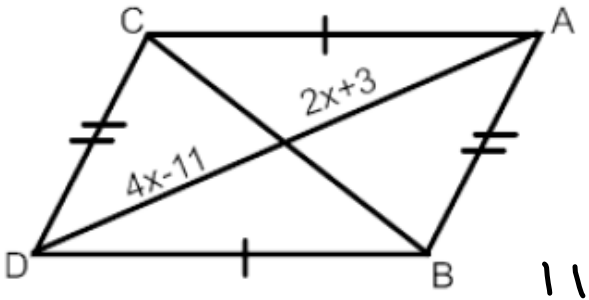
21. Determine what x, y, and z equal.



22. Determine what x equals.



23. Solve for x.



$4x - 11 = 2x + 3$

$x = 7$

24. Label each missing angle with the correct angle measure.