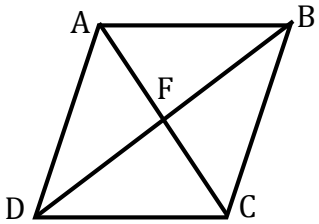
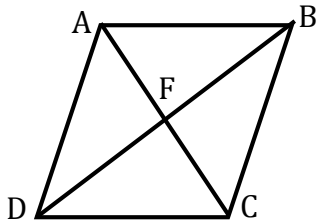
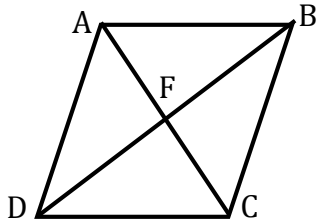
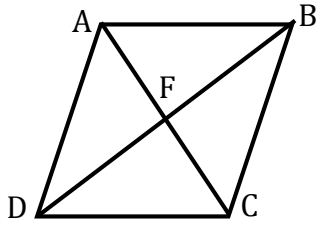
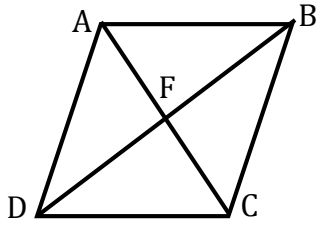
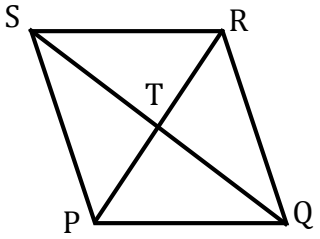
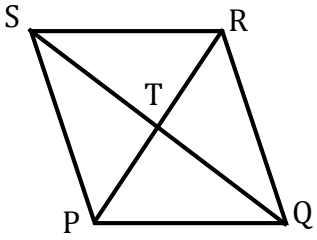
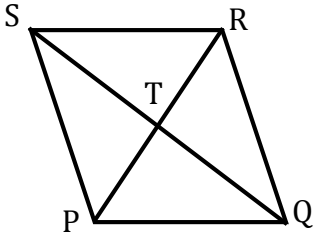
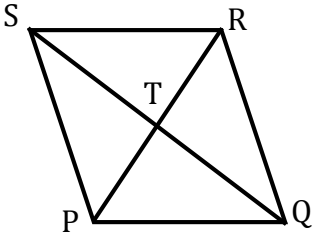
NAME_____**DATE**_____**PER.**_____

7.4 SQUARES & RHOMBI

Use rhombus ABCD and the given information to find each value.

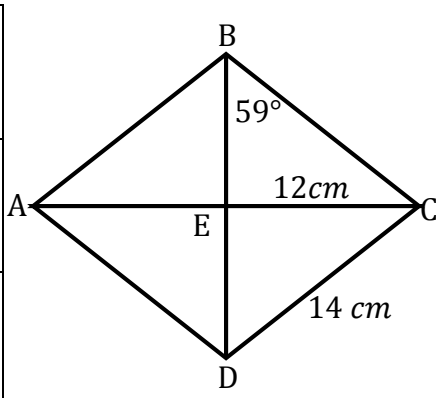
1. $m\angle ACD =$ _____	If $m\angle BAF = 28°$, find $m\angle ACD$. 
2. $x =$ _____	Find 'x' if $m\angle AFB = (16x + 6)°$. 
3. $m\angle ABC =$ _____	If $m\angle ACD = 34°$, find $m\angle ABC$. 
4. $x =$ _____	Find 'x' if $m\angle BFC = (120 - 4x)°$. 
5. $x =$ _____	What is the value of 'x' if $m\angle BAC = (4x + 6)°$ and $m\angle ACD = (12x - 18)°$? 

Use rhombus PQRS and the given information to find each value.

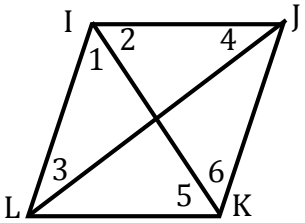
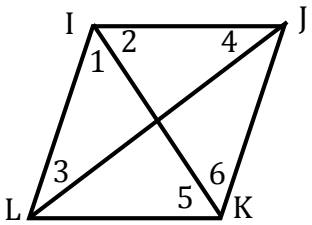
6. $SQ =$ _____	If $ST = 13$, find SQ. 
7. $m\angle QRS =$ _____	If $m\angle PRS = 17°$, find $m\angle QRS$. 
8. $m\angle STR =$ _____	Find $m\angle STR$. 
9. $x =$ _____	If $SP = 4x - 3$ and $PQ = 18 + x$, find the value of 'x'. 

Use the rhombus ABCD and the given information to find each measure.

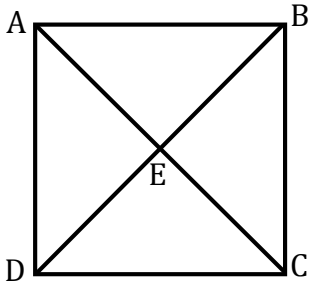
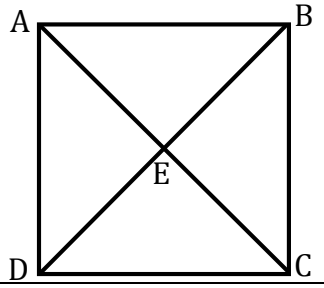
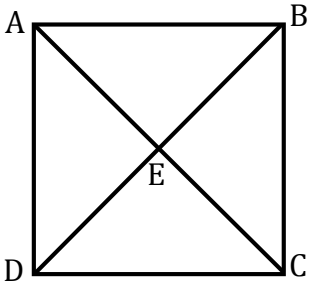
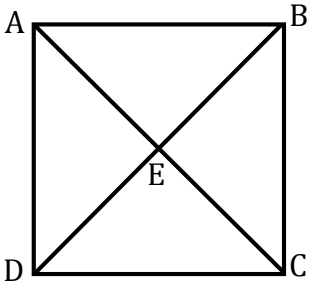
10. $m\angle BCE =$_____	Find $m\angle BCE$.
11. $m\angle BEC =$_____	Find $m\angle BEC$.
12. $AC =$_____	Find AC.
13. $m\angle ABD =$_____	Find $m\angle ABD$.
14. $AD =$_____	Find AD.



Use rhombus IJKL and the given information to find each value.

15. $m\angle 1 =$_____	If $m\angle 3 = 62°$, find $m\angle 1$. 
16. $x =$_____	If $m\angle 4 = (3x - 1)°$ and $m\angle 3 = (2x + 30)°$, find the value of 'x'. 

Use square ABCD and the given information to find each value.

17. $x =$ _____	If $m\angle \mathrm{AEB} = (3x)°$, find '$x$'. 
18. $x =$ _____	If $m\angle \mathrm{BAC} = (9x)°$, find '$x$'. 
19. $\mathrm{BC} =$ _____	If $\mathrm{AB} = 2x + 4$ and $\mathrm{CD} = 3x - 5$, find BC. 
20. $x =$ _____	If $m\angle \mathrm{BAC} = (3x)°$, find '$x$'. 

REVIEW PROBLEMS
Solve each of the following.

21. $x =$ _____ $y =$ _____	In parallelogram ABCD, $\mathrm{AB} = 4x + 9$, $m\angle\mathrm{BAC} = (5y + 1)°$, $m\angle\mathrm{D} = 75°$, $m\angle\mathrm{ACD} = 56°$, and $\mathrm{CD} = 45$. Find the value of 'x' and 'y'.
22. Classification: Why?	The angles in a triangle have measures $(7x - 8)°$, $(3x + 3)°$, and $(18x - 11)°$. Is this triangle acute, obtuse, or right? Explain.
23. $x =$ _____ $m\angle\mathrm{DBC} =$ _____	$\overrightarrow{\mathrm{BD}}$ is a bisector of $\angle\mathrm{ABC}$. $m\angle\mathrm{ABD} = (2x + 7)°$ and $m\angle\mathrm{ABC} = 54°$. Find the value of '$x$', and the $m\angle\mathrm{DBC}$.