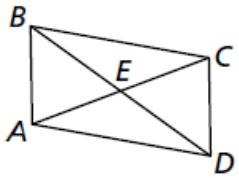
Geometry
Ch 6 Group Review

Name _____

Group# _____ **Per:** _____

1. Each of the parallel sides of a trapezoid is called a(n) _____.

2. In //gram ABCD, $m\angle ABC = 79°$, BC = 62.4 and BD = 75. Find …

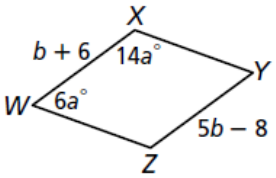


a. AD

b. $m\angle CDA$

c. $m\angle DAB$

3. WXYZ is a //gram. Find…

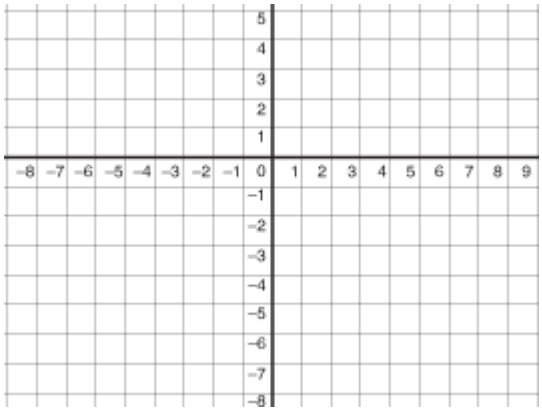


a. YZ

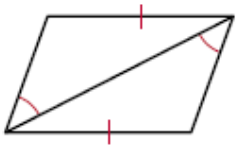
b. $m\angle X$

c. $m\angle Z$

4. Three vertices of //gram RSTV are R(-8, 1), S(2, 3), and V(-4, -7). Find the coordinates of vertex T.

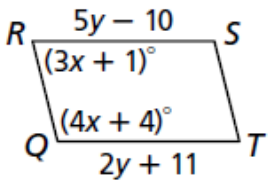


5. Determine if the quadrilateral is a //gram. Justify your answer.

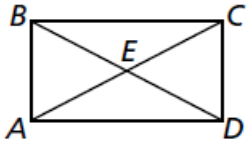


6. Show that the quadrilateral is a //gram for the given values of the variables.

$x = 25, y = 7$



7. In rectangle ABCD, CD = 18 and CE = 19.8. Find...

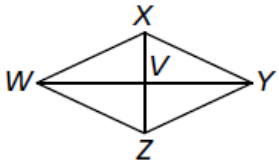


a. AB

b. BD

c. BC

8. In rhombus WXYZ, WX = (7a + 1), WZ = (9a – 6), And VZ = (3a). Find…

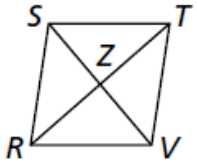


a. WZ

b. XY

c. XZ

9. In rhombus RSTV, $m\angle TZV = (8n + 18)°$, and $m\angle SRV = (9n + 1)°$. Find…

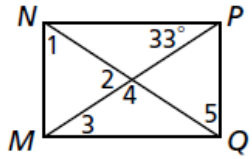


a. $m\angle STV$

b. $m\angle TRS$

10. Find the measures of the numbered angles.

rectangle $MNPQ$



$m\angle 1 =$ _____

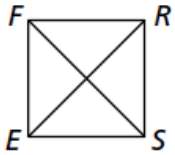
$m\angle 2 =$ _____

$m\angle 3 =$ _____

$m\angle 4 =$ _____

$m\angle 5 =$ _____

11. Determine whether the conclusion is valid. Explain.

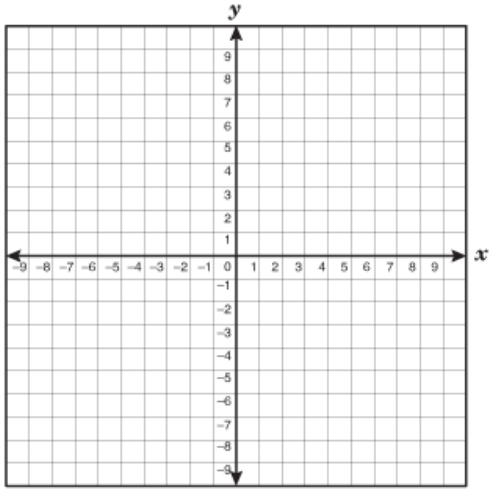


a. Given: $\overline{ER} \perp \overline{FS}$, $\overline{ER} \cong \overline{FS}$
Conclusion: $EFRS$ is a square.

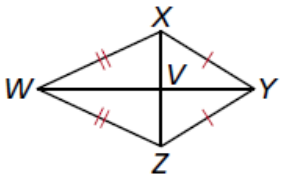
b. Given: $\overline{EF} \parallel \overline{RS}$, $\overline{FR} \parallel \overline{ES}$, $\overline{EF} \cong \overline{ES}$
Conclusion: $EFRS$ is a rhombus.

12. <u>Use the diagonals</u> to tell whether the //gram is a rectangle, rhombus, or square. Give all names that apply.

D(-4, -3), H(5, 6), L(8, 3), P(-1, -6)



13. In kite WXYZ, $m\angle VXY = 58°$, and $m\angle ZWX = 50°$. Find…

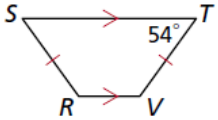


a. $m\angle XYZ$

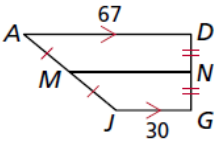
b. $m\angle VZW$

14. Find each measure.

a.



b.



$m\angle R =$ _____

MN = _____

$m\angle S =$ _____

15. Find the value of n so that PQXY is isosceles.