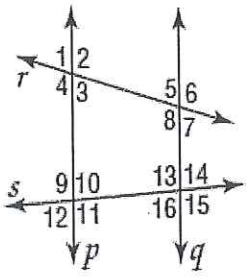
Chapter 3 Test Review Name_____

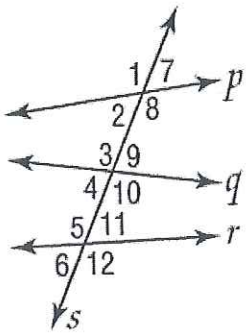
In the figure, m∠2 = 115 and m∠12 = 85. Find the measure of each angle.

1. ∠10
2. ∠8
3. ∠9
4. ∠5
5. ∠11
6. ∠13



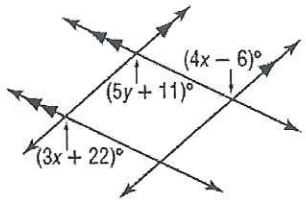
In the figure, determine whether the angles are corresponding, alternate interior, alternate exterior, consecutive interior angles, or a linear pair.

7. ∠3 and ∠12 _____
8. ∠6 and ∠11 _____
9. ∠7 and ∠9 _____
10. ∠2 and ∠3 _____
11. ∠5 and ∠10 _____

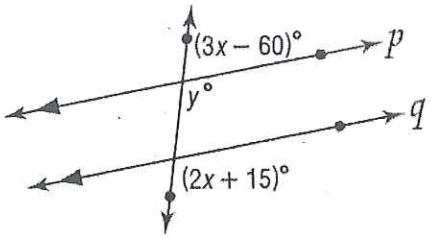


Find x and y in each figure.

12.

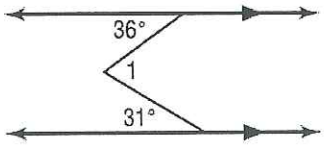


13.

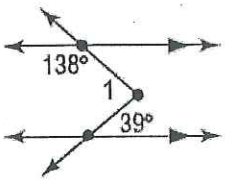


Find m∠1 in each figure.

14.

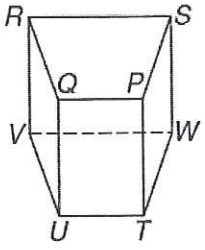


15.



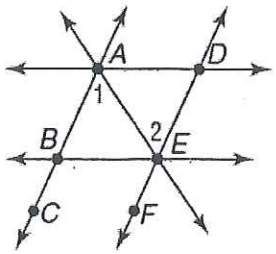
Refer to the figure at the right.

16. Identify 2 parallel planes
17. Name a line skew to $\overline{RV}$
18. How many lines are parallel to $\overline{RV}$?
19. Name a plane that intersects plane RQP.

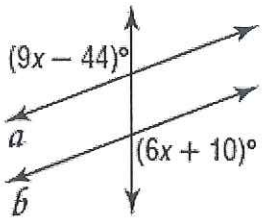


Given the following information, determine which lines, if any, are parallel. State which angle relationship proves it.

	Parallel	∠ Relationship
20. $\angle 1 \cong \angle 2$	_____	_____
21. $\angle DAB \cong \angle EBC$	_____	_____
22. $m\angle ADE + m\angle BED = 180$	_____	_____



23. Find x so that a || b.



Determine whether $\overleftrightarrow{QV}$ and $\overleftrightarrow{RM}$ are parallel, perpendicular, or neither.

24. Q(-3, -8), V(5, 12), R(-2.5, 1), M(-5, 2)

25. Q(-2, 4.5), V(4, 9), R(-4, -12), M(10, -1.5)

26. Write an equation in slope-intercept form for a line with m = 4 and a y-intercept of -3.

27. Write an equation in point-slope form for a line with a slope of 2 and contains the point (3, 1)

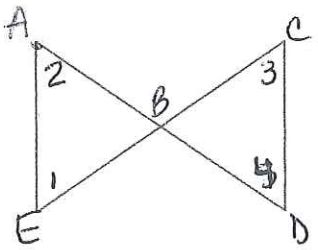
28. Write an equation of a line in slope-intercept form containing (-3, 13) and (6, -5).

NAME:_____ DATE:_____ HOUR:_____

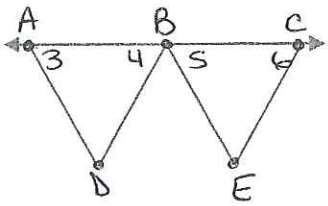
Chapter 3 Test Review: Proofs

For each of the following complete the 2-column proof.

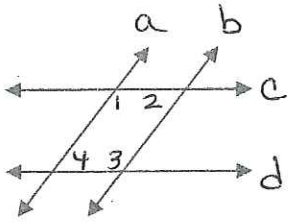
1) Given: $\angle 1 \cong \angle 2$
$\angle 1 \cong \angle 4$
Prove $\overline{AE} \parallel \overline{CD}$



2) Given: $\overline{AD} \parallel \overline{BE}$
$\angle 3 \cong \angle 4$
$\angle 5 \cong \angle 6$
Prove: $\overline{BD} \parallel \overline{CE}$



3) Given: $d \parallel c$
$\angle 1 \cong \angle 3$
Prove: $a \parallel b$



4) Given: $l \perp t$
$m \perp t$
Prove: $l \parallel m$