

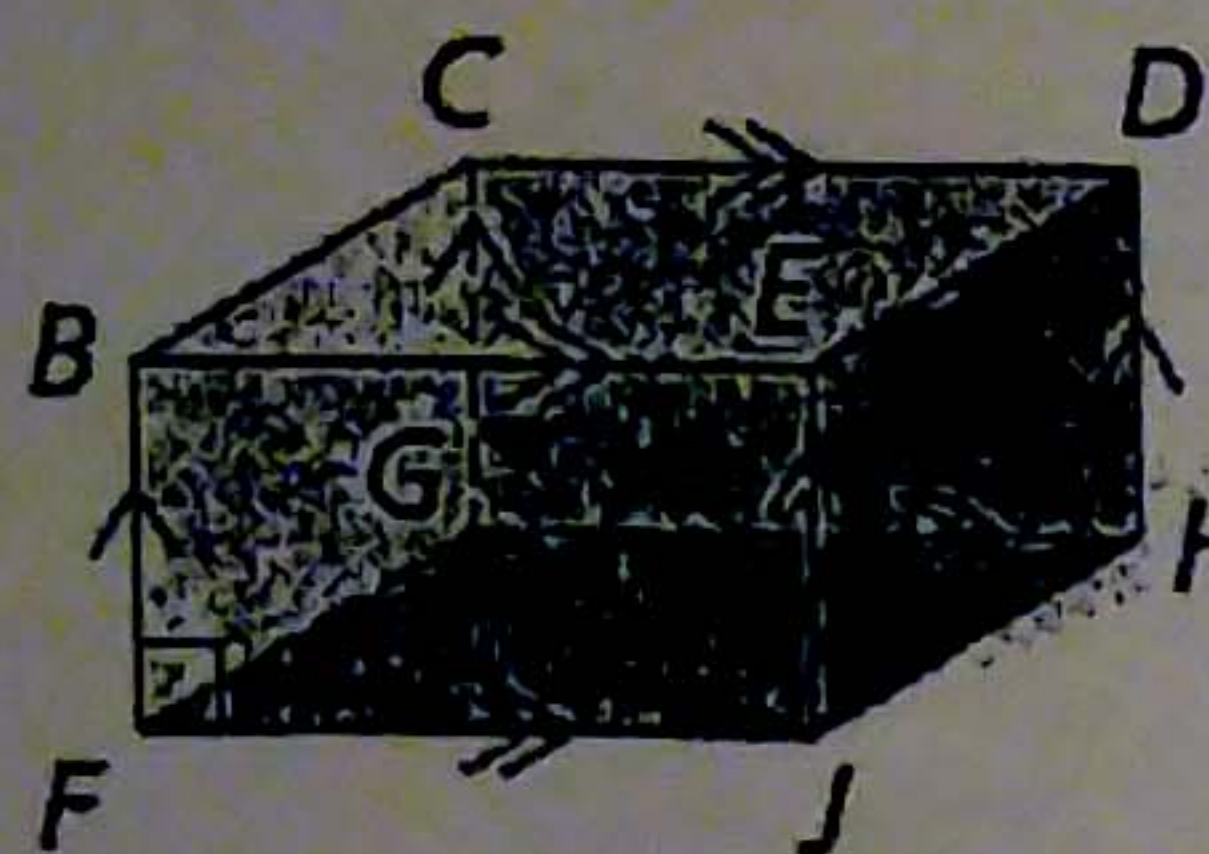
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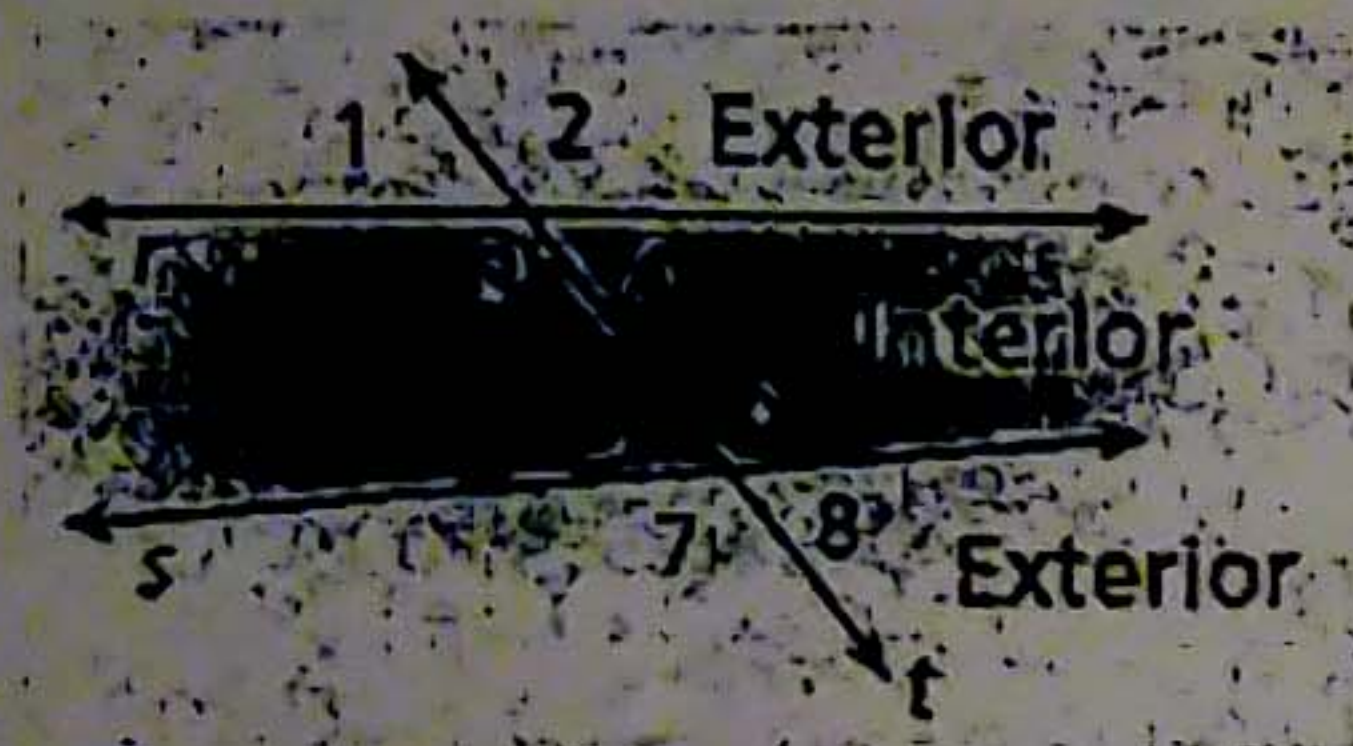
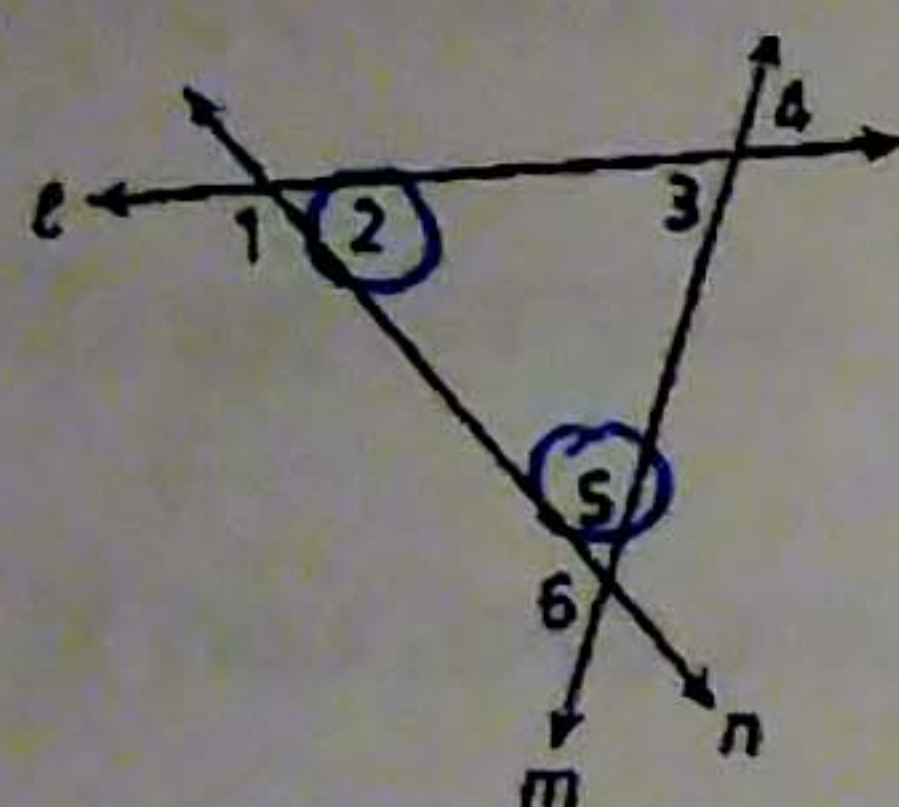
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**CHAPTER 3 REVIEW SHEET****Section 1:**

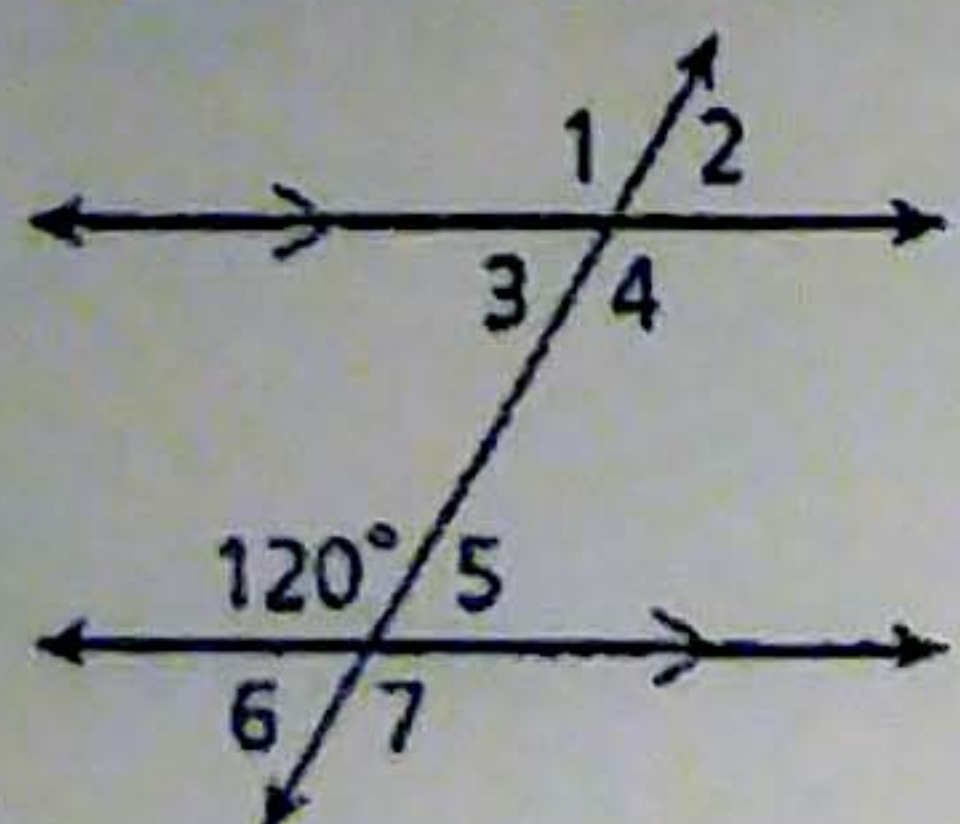
Use the diagram to find the following:

Pair of Parallel Lines:  $\overline{BF}$  &  $\overline{ET}$ Pair of Perpendicular Lines:  $\overline{BF}$  &  $\overline{FJ}$ Pair of Skew Lines:  $\overline{BF}$  &  $\overline{CD}$ Pair of Parallel Planes:  $BFE$  &  $CGD$ 

Use the diagram to find the following:

Pair of Corresponding Angles:  $\angle 3$  &  $\angle 7$ Pair of Alternate Interior Angles:  $\angle 3$  &  $\angle 6$ Pair of Same-Side Interior Angles:  
 $\angle 3$  &  $\angle 5$ Pair of Alternate Exterior Angles:  $\angle 2$  &  $\angle 7$ Identify the transversal and classify the angle pair  $\angle 2$  and  $\angle 5$  in the diagram above.TRANSVERSAL: LINE  $n$  $\angle 2$  &  $\angle 5$  ARE SAME SIDE INTERIOR ANGLES**Section 2:**If lines are parallel, then corresponding angles are  $\cong$ .If lines are parallel, then alternate interior angles are  $\cong$ .If lines are parallel, then alternate exterior angles are  $\cong$ .If lines are parallel, then same-side interior angles are SUPPLEMENTARY.

Find each angle measure:

13.  $m\angle 1$   $120^\circ$  14.  $m\angle 2$   $60^\circ$  15.  $m\angle 3$   $60^\circ$ 16.  $m\angle 4$   $120^\circ$  17.  $m\angle 5$   $60^\circ$  18.  $m\angle 6$   $60^\circ$ 19.  $m\angle 7$   $120^\circ$ **Section 3:**If corresponding angles are  $\cong$ , then lines are PARALLEL.If alternate interior angles are  $\cong$ , then lines are PARALLEL.If alternate exterior angles are  $\cong$ , then lines are PARALLEL.If same-side interior angles are SUPPLEMENTARY, then lines are PARALLEL.

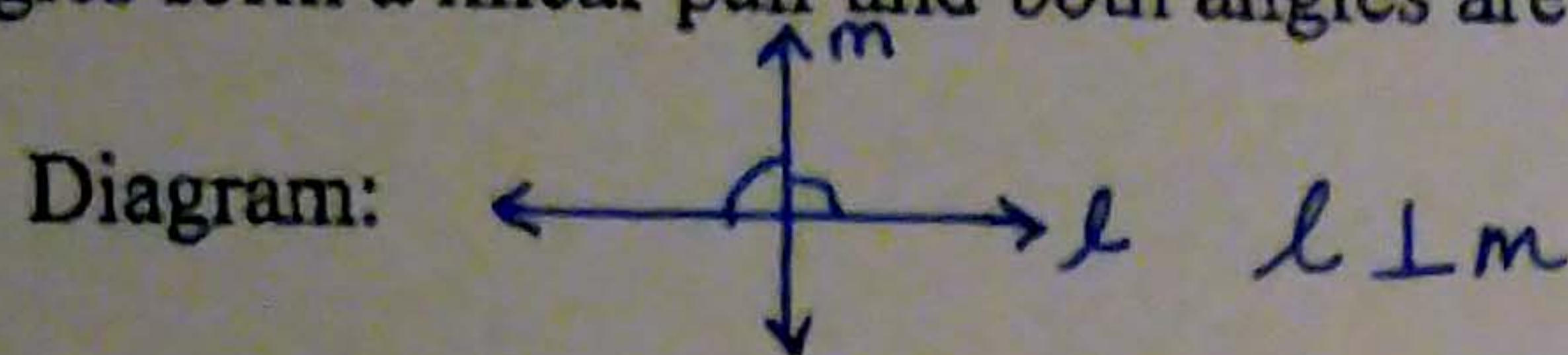


If there is a point not on a line, how many lines through that point are parallel to the line? ONE

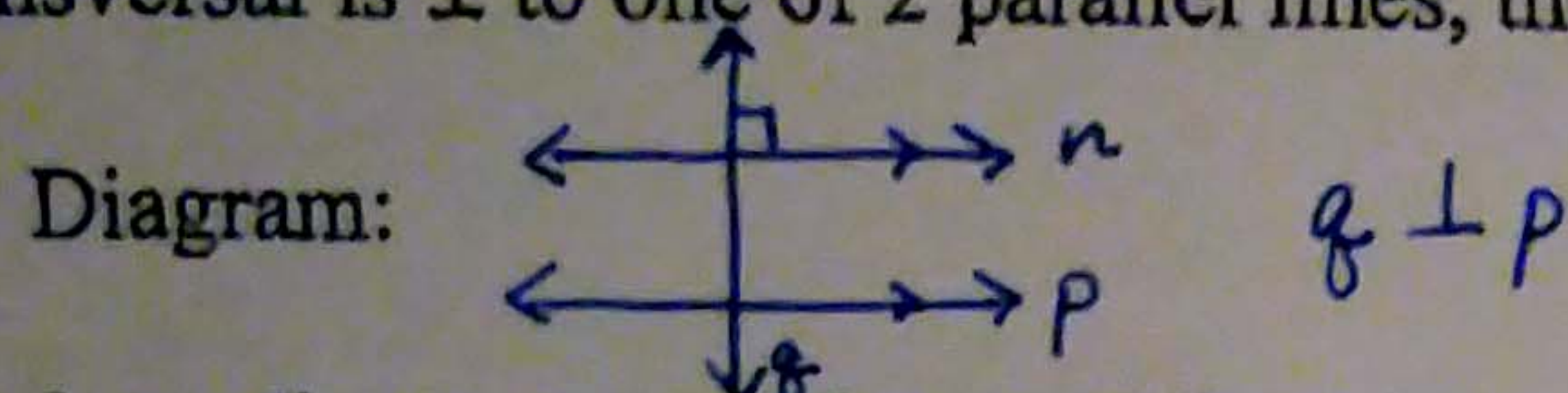
#### Section 4:

The shortest distance from a point to a line is: THE SEGMENT PERPENDICULAR TO THE LINE

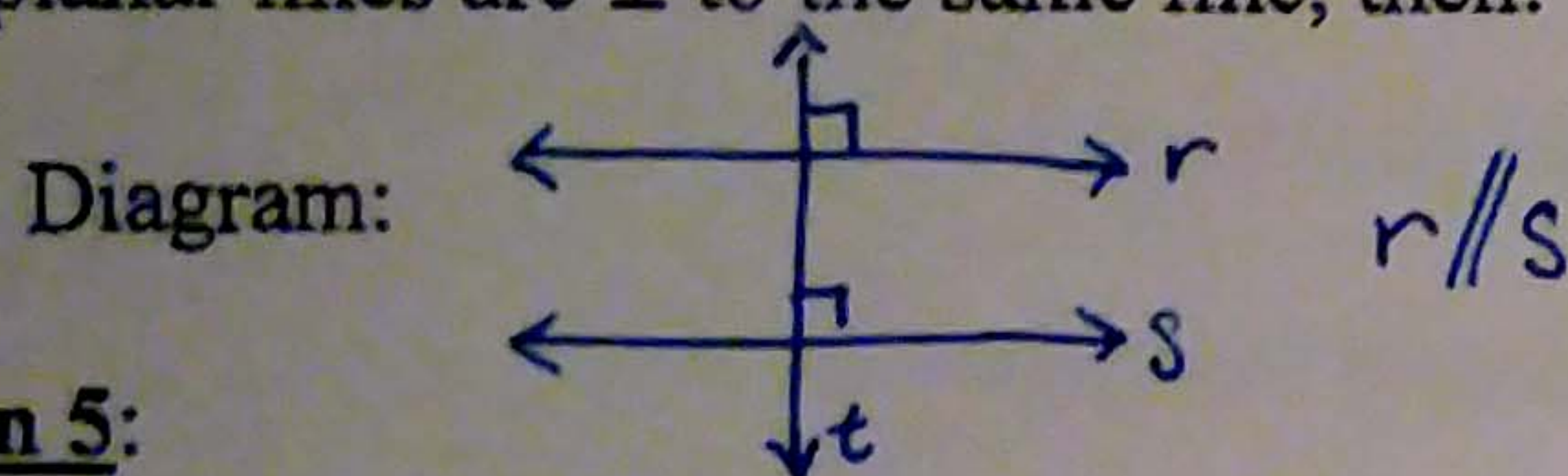
If 2 angles form a linear pair and both angles are congruent, then: THE LINES ARE PERPENDICULAR



If a transversal is  $\perp$  to one of 2 parallel lines, then: IT IS PERPENDICULAR TO THE OTHER LINE



If 2 coplanar lines are  $\perp$  to the same line, then: THE TWO LINES ARE PARALLEL TO EACH OTHER.



#### Section 5:

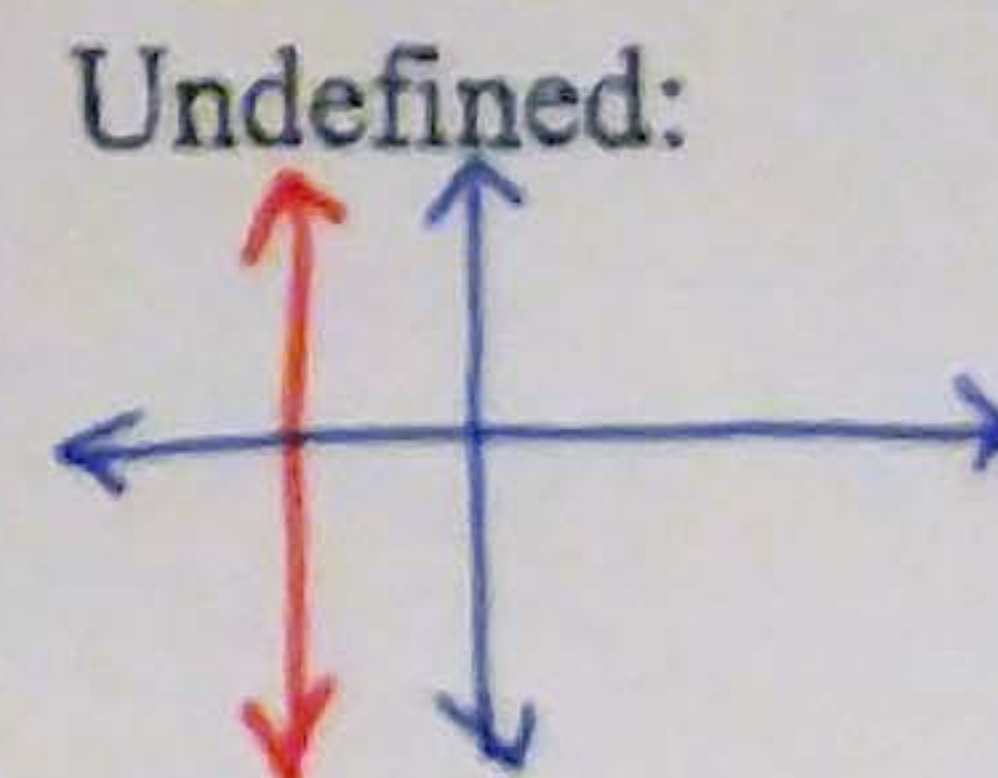
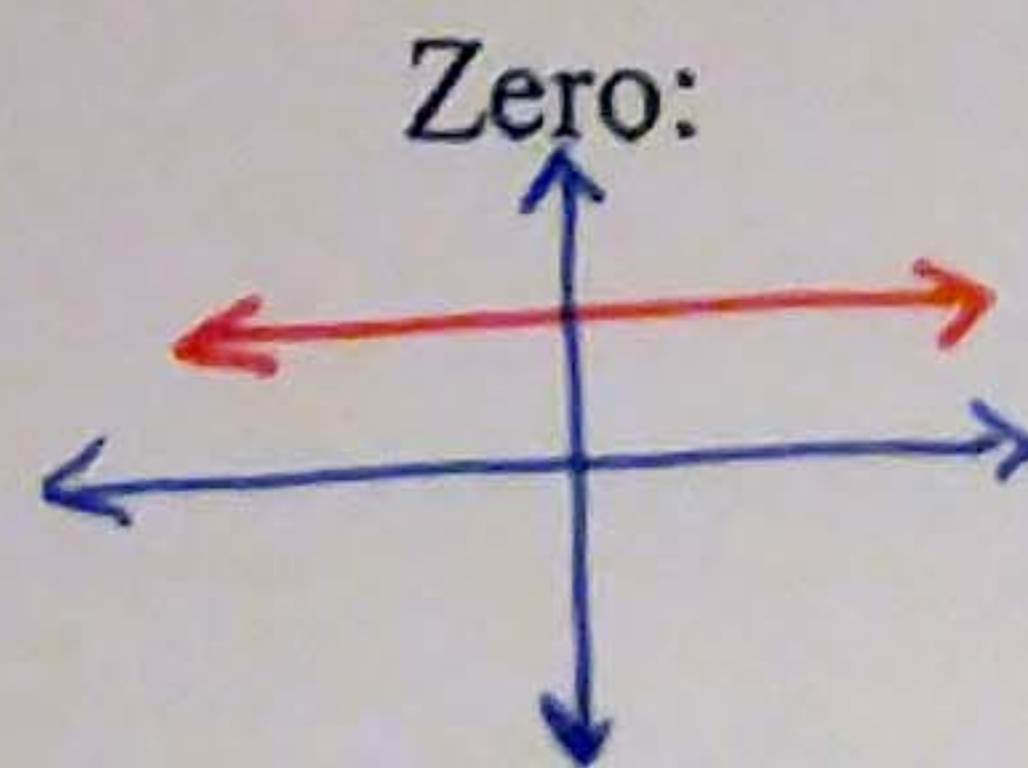
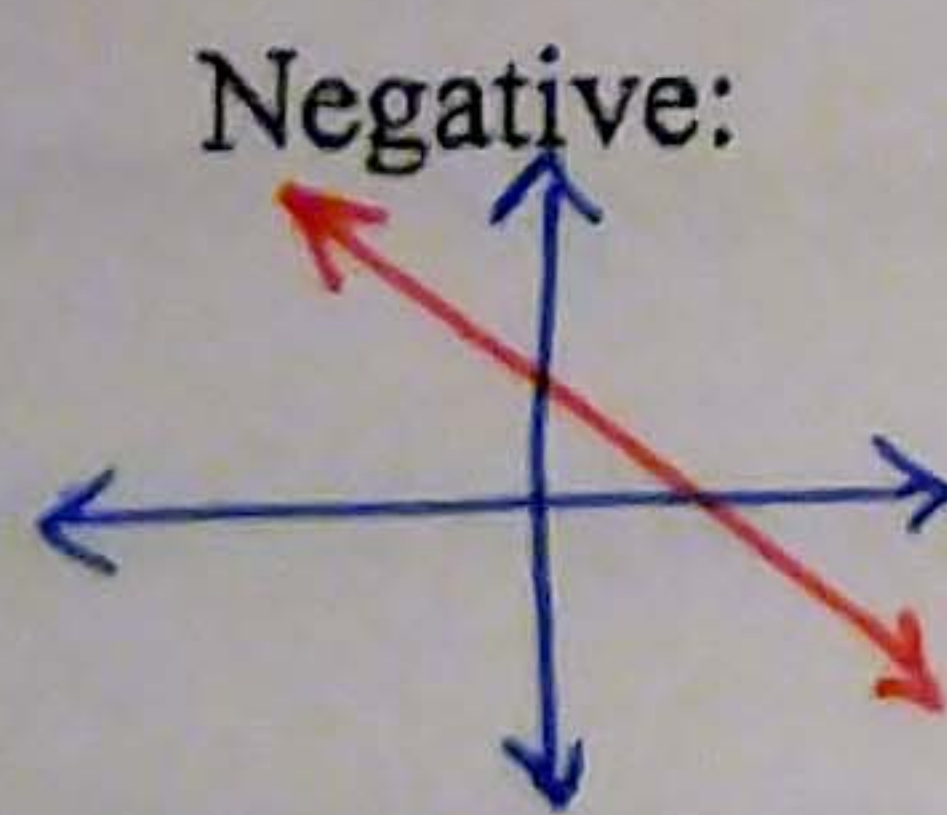
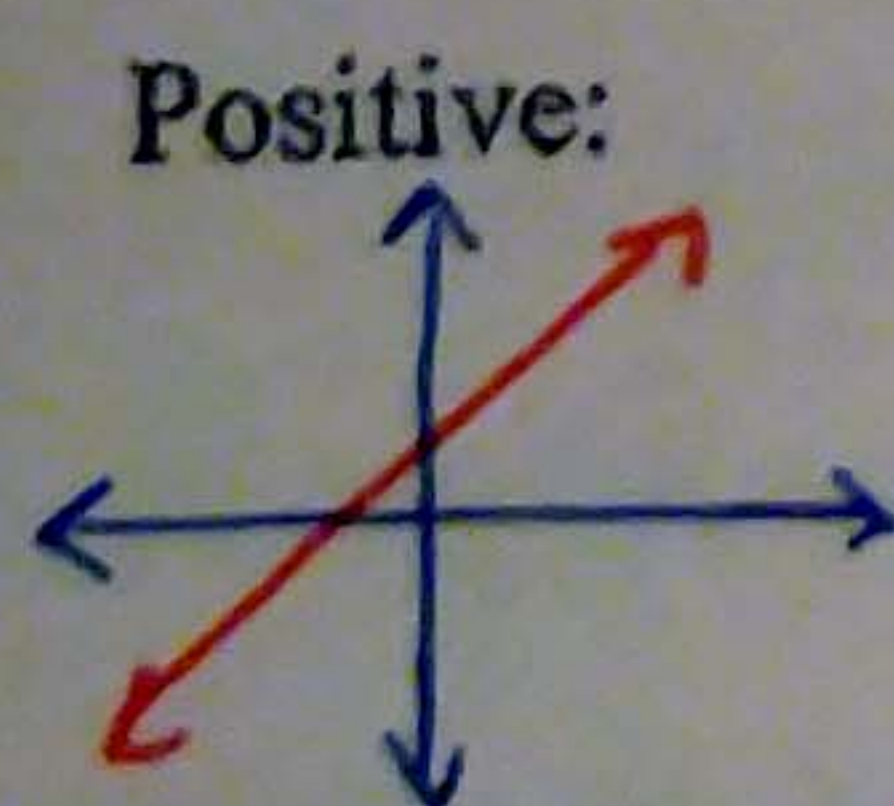
Slope (definition): THE STEEPNESS OF A LINE, THE RATIO OF RISE TO RUN

Slope formula:  $\frac{y_2 - y_1}{x_2 - x_1}$

If two lines are parallel, then their slopes are: THE SAME

If two lines are perpendicular, then their slopes are: NEGATIVE RECIPROCALLS / OPPOSITE RECIPROCALLS

Draw examples of lines with the following slope characteristics:



Circle the following equation whose graph is vertical:  $y = 4$   $x = 3$

Circle the following equation whose graph is horizontal:  $y = 4$   $x = 3$

ALGEBRA I REVIEW

- Point-Slope Form:  $y - y_1 = m(x - x_1)$
- Slope-Intercept Form:  $y = mx + b$
- Standard Form:  $Ax + By = C$

If two lines are parallel, then their slopes are THE SAME and the y-intercepts are DIFFERENT.

If two lines intersect, then their slopes are DIFFERENT.

If two lines coincide, then their slopes are THE SAME and the y-intercepts are THE SAME.