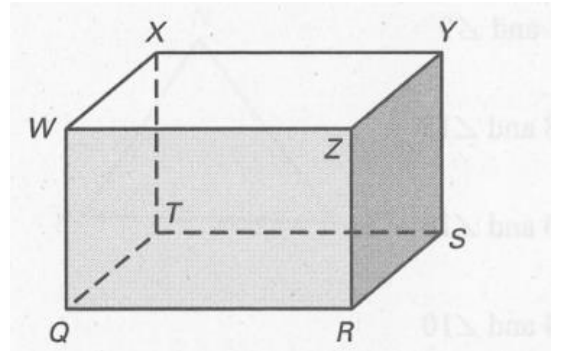


Unit 3- Day #1 Worksheet: Angle Relationships with Transversals

1. A line that intersects two other lines is called a _____.

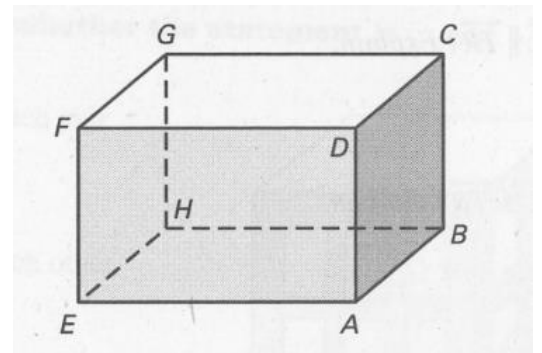
Think of each segment in the diagram as part of a line. Complete the statement with *parallel*, *skew* or *perpendicular*.

2. \overleftrightarrow{WZ} and \overleftrightarrow{ZR} are _____
3. \overleftrightarrow{WZ} and \overleftrightarrow{ST} are _____
4. \overleftrightarrow{QT} and \overleftrightarrow{YS} are _____
5. Plane WZR and plane SYZ are _____
6. Plane RQT and plane YXW are _____



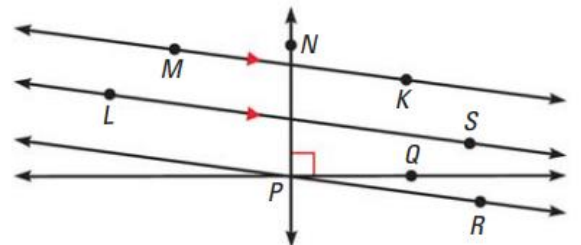
Think of each segment in the diagram as part of a line. Which line(s) or plane(s) appear to fit the description?

7. Line(s) parallel to \overleftrightarrow{EH}
8. Line(s) perpendicular to \overleftrightarrow{EH}
9. Line(s) skew to \overleftrightarrow{CD} and containing point F
10. Plane(s) perpendicular to plane AEH
11. Plane(s) parallel to plane FGC



Use the markings in the diagram.

12. Name a pair of parallel lines.
13. Name a pair of perpendicular lines
14. Is $\overleftrightarrow{PR} \parallel \overleftrightarrow{KM}$. Explain
15. Is $\overleftrightarrow{PR} \perp \overleftrightarrow{NP}$. Explain

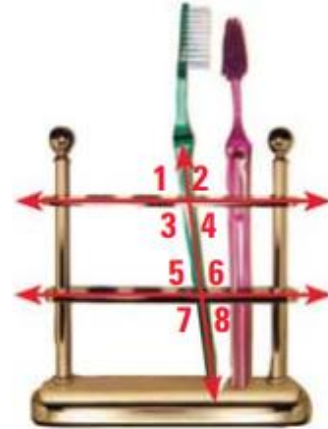


Complete the statement with sometimes, always or never

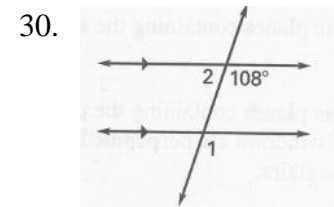
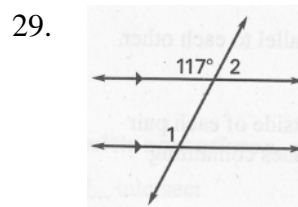
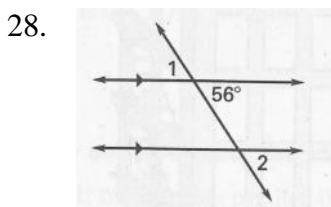
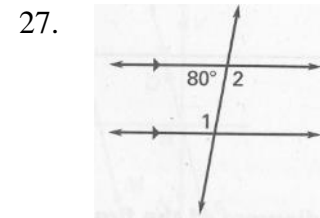
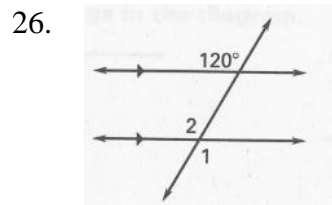
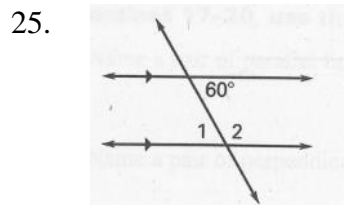
16. If two lines are parallel, then they _____ intersect.
17. If one line is skew to another, then they are _____ coplanar.
18. If two lines intersect, then they are _____ perpendicular.
19. If two lines are coplanar, then they are _____ parallel.

Find the angle measure. Tell which postulate or theorem you use. (each problem has new measures)

20. If $m\angle 4 = 65^\circ$, then $m\angle 1 =$ _____
21. If $m\angle 7 = 110^\circ$, then $m\angle 2 =$ _____
22. If $m\angle 5 = 71^\circ$, then $m\angle 4 =$ _____
23. If $m\angle 3 = 117^\circ$, then $m\angle 5 =$ _____
24. If $m\angle 8 = 54^\circ$, then $m\angle 3 =$ _____

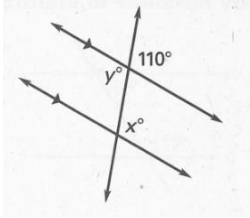


Find $m\angle 1$ and $m\angle 2$. Tell which postulate or theorem you use.

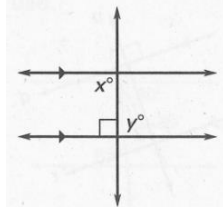


Find values for x and y .

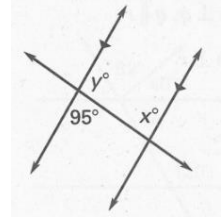
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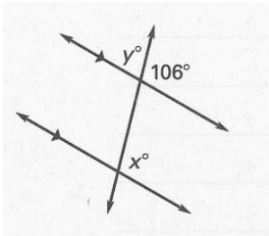
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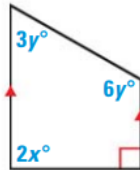
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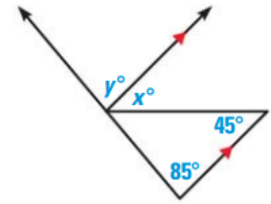
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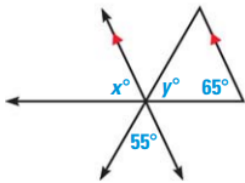
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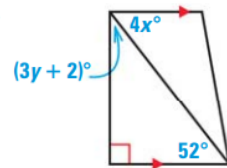
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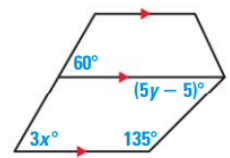
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38.

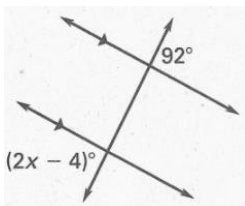


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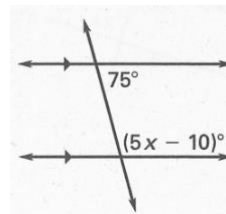


Find the value of x .

40.



41.



42.

