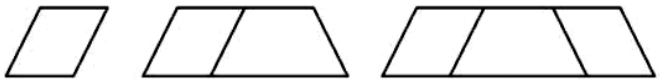
Name:_____Date:_____Period:__ **Chapter 1-2 Review**

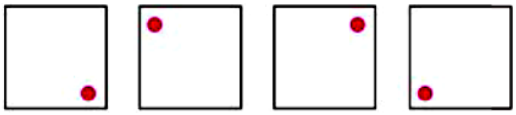
Find the next two terms in each sequence.

1. 12, 17, 22, 27, 32, . . . **2.** 5000, 1000, 200, 40, . . . **3.** 1, 4, 9, 16, 25, . . . **4.** 1, 12, 123, 1234, . . .

5. **Draw the next figure in each sequence.**



6.

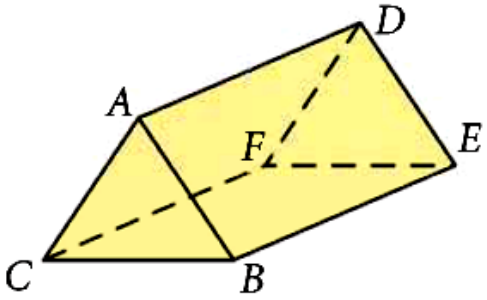


Write *true* or *false*.

7. A, D, F are coplanar.

8. $\overleftrightarrow{AC}$ and $\overleftrightarrow{FE}$ are coplanar.

9. $\overleftrightarrow{BC}$ and $\overleftrightarrow{DF}$ are skew lines.



10. A, B, E are coplanar.

11. D, A, B, E are coplanar.

12. $\overleftrightarrow{FC} \parallel \overleftrightarrow{EF}$

13. $\overleftrightarrow{DE} \parallel \overleftrightarrow{CF}$

14. $\overleftrightarrow{AD}$ and $\overleftrightarrow{EB}$ are skew lines.

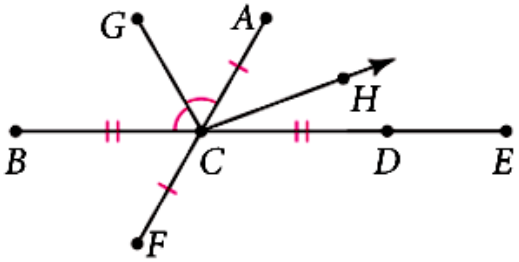
15. plane $ABC \parallel$ plane FDE

16. $\overline{AB}$ and $\overline{CD}$ do not intersect but $\overrightarrow{DC}$ intersects $\overline{AB}$ in one point. Make a sketch that shows this.

Use the figure at the right

17. If $BC = 12$ and $CE = 15$, then $BE =$ ■.

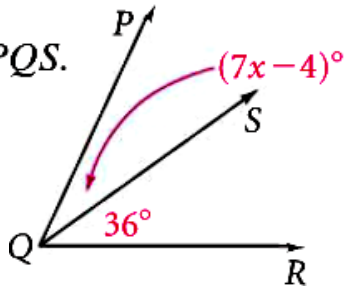
18. ■ is the angle bisector of ■.



19. $BC = 3x + 2$ and $CD = 5x - 10$. Solve for x.

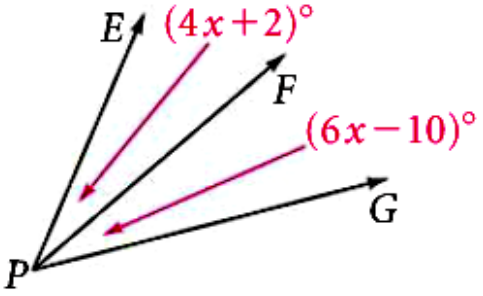
20. $m\angle ACD = 60$ and $m\angle DCH = 20$. Find $m\angle HCA$.

21. In the figure at the right, $m\angle PQR = 4x + 47$. Find $m\angle PQS$.



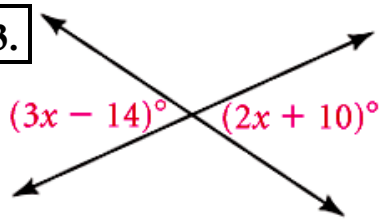
22. Solve for x. Show your work. Justify each step.

Given: $\overrightarrow{PF}$ bisects $\angle 1$.



Find the value of x.

23.



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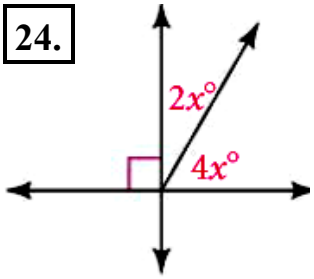

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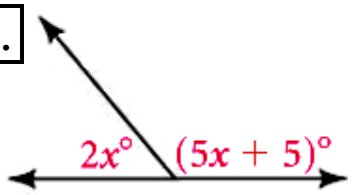
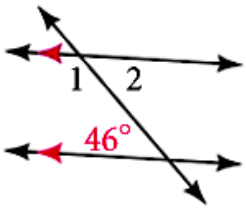


Find $m\angle 1$ and then $m\angle 2$. State the theorems or postulates that justify your answers.

26.



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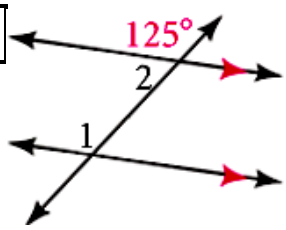

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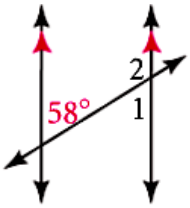

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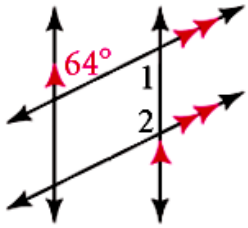
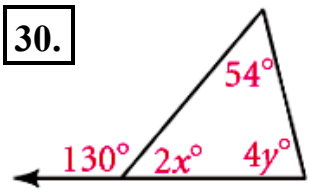
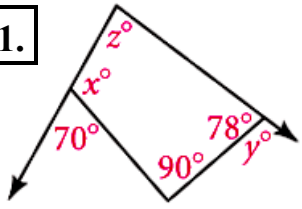


Find the value of each variable.

30.



31.



32.