

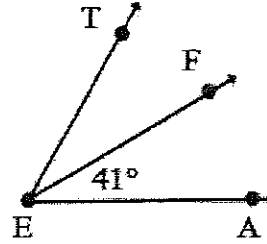
Angles Review

Name: HIRSCH

Period: _____ Date: _____

For Questions 1 - 2, EF is the angle bisector of $\angle TEA$.

- Find the measure of $\angle TEF$ 41°
- Find the measure of $\angle TEA$ 82°



For Questions 3 - 4, BD bisects $\angle ABC$. Find the value of x.

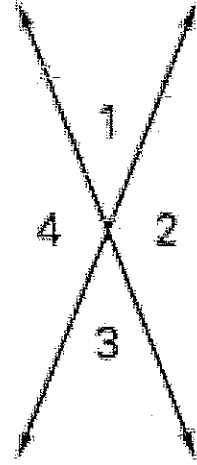
3.
$$\begin{array}{r} x = 7x - 48 \\ -7x \quad -7x \\ \hline -6x = -48 \\ -6 \quad -6 \\ \hline x = 8 \end{array}$$

4.
$$\begin{array}{r} 4x = x + 27 \\ -x \quad -x \\ \hline 3x = 27 \\ 3 \quad 3 \\ \hline x = 9 \end{array}$$

For Questions 5 - 10, use the diagram to the right.

Solve for the missing angle measure:

- If $m \angle 1 = 36^\circ$, then $m \angle 3 = 36^\circ$
- If $m \angle 2 = 120^\circ$, then $m \angle 1 = 60^\circ$
- If $m \angle 4 = 133^\circ$, then $m \angle 2 = 133^\circ$



State whether the angles are a linear pair or vertical.

- $\angle 1$ and $\angle 2$ linear pair
- $\angle 2$ and $\angle 4$ vertical
- $\angle 1$ and $\angle 3$ vertical

For Questions 12 - 15, Find the values of y.

12. Linear pair
$$y = 100^\circ$$

13. vertical
$$\begin{array}{r} 7y + 16 = 3y + 24 \\ -3y \quad -3y \\ \hline 4y + 16 = 24 \\ -16 \quad -16 \\ \hline 4y = 8 \\ 4 \quad 4 \\ \hline y = 2 \end{array}$$

14. vertical
$$\begin{array}{r} 7y - 3 = 2y + 42 \\ -2y \quad -2y \\ \hline 5y - 3 = 42 \\ +3 \quad +3 \\ \hline 5y = 45 \\ 5 \quad 5 \\ \hline y = 9 \end{array}$$

15. Linear pair
$$\begin{array}{r} 9y - 4 + 49 = 180 \\ 9y + 45 = 180 \\ -45 \quad -45 \\ \hline 9y = 135 \\ 9 \quad 9 \\ \hline y = 15 \end{array}$$

- Given that $\angle E$ is 61° , find the complement 29° and supplement 119°
- Given that $\angle G$ is 147° , find the complement can't do it. and supplement 33°