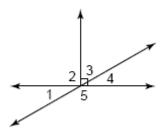
Classwork 1-5 Pairs of Angles

Using the figure below list all of the following that apply to each pair of angles: adjacent, vertical, complimentary, supplementary, and linear pair



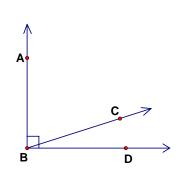
1. $\angle 1$ and $\angle 2$

2. $\angle 1$ and $\angle 4$

3. $\angle 4$ and $\angle 5$

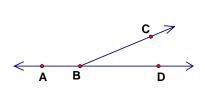
4. $\angle 1$ and $\angle 5$

Refer to the figure below and answer the following questions.



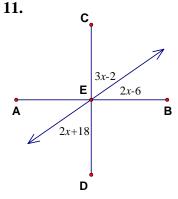
- **5.** If $m\angle ABC = 71^{\circ}$, then find $m \angle CBD$.
- **6.** If $m \angle DBC = 23^{\circ}$, then find $m \angle CBA$.
- 7. If $m \angle ABD = 2x 7$, then find x.
- **8.** If $m\angle ABC = 3x + 12$ and $m\angle CBD = x - 8$, then find x.

Refer to the figure below and answer the following questions.



- **9.** If $m \angle ABC = 136^{\circ}$, then find $m\angle CBD$.
- **10.** If $m \angle ABC = 7x 3$ and $m\angle CBD = 2x + 12$, then find x.

Find x and determine if $\overline{AB} \perp \overline{CD}$.



12.

