Practice Worksheet for Lesson 2-5 Name:

Mailbox #:

Name the definition or state the theorem that justifies the statement about the diagram.

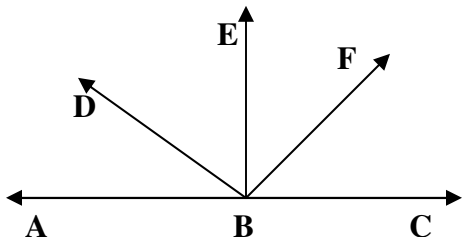
1) If < EBC is a right angle, then $\overrightarrow{BE} \perp \overrightarrow{AC}$

2) If $\overrightarrow{BE} \perp \overrightarrow{AC}$, then < ABD and < DBE are complementary

3) If m< ABD and m< DBE are complementary angles, then m< ABD + m< DBE = 90°

4) If $\overrightarrow{BE} \perp \overrightarrow{AC}$, then m< ABE = 90°

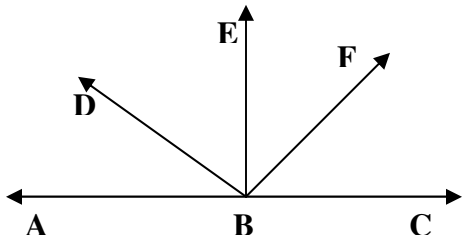
5) If < ABE ≅ < EBC, then $\overrightarrow{BE} \perp \overrightarrow{AC}$



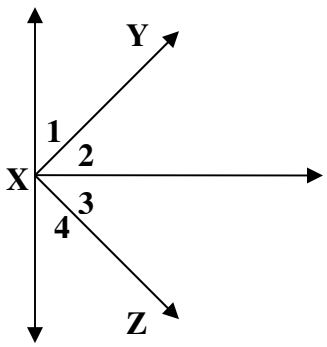
In the diagram $\overrightarrow{BE} \perp \overrightarrow{AC}$ and $\overrightarrow{BD} \perp \overrightarrow{BF}$. Find the value of x.

6) m< ABD = 2x – 15, m< DBE = x

7) m< ABD = 3x – 12, m< DBE = 2x + 2, m< EBF = 2x + 8



Decide whether you can you conclude from the information given that $\overrightarrow{XY} \perp \overrightarrow{XZ}$

8) m< 1 = 46° and m< 4 = 44°	
9) < 1 and < 3 are complementary	
10) < 2 is congruent to < 3	
11) m< 1 = m< 4	
12) m< 1 = m< 2 and m< 3 = m< 4	