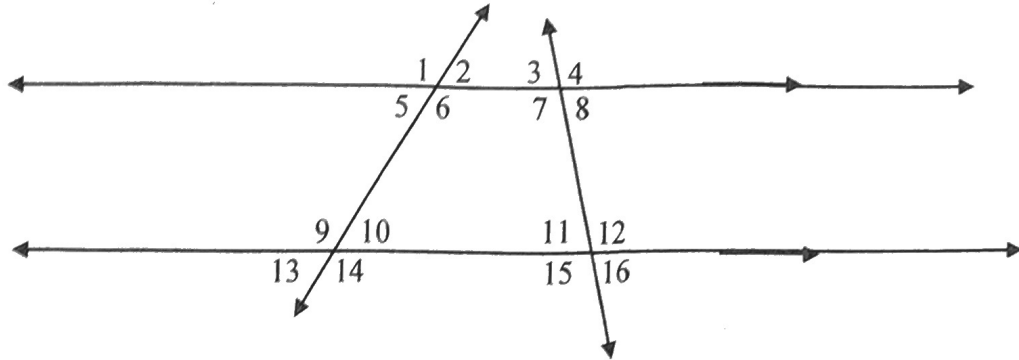


Name : \_\_\_\_\_



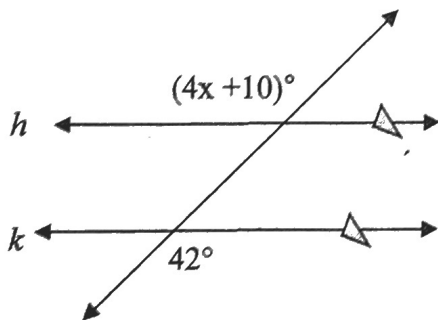
Let  $m\angle 1 = 115^\circ$  and  $m\angle 12 = 110^\circ$ . Find the measure of each indicated angle.

|  |  |
|--|--|
| 1) $m\angle 9 = \underline{\hspace{2cm}}$  | 2) $m\angle 4 = \underline{\hspace{2cm}}$  |
| 3) $m\angle 10 = \underline{\hspace{2cm}}$ | 4) $m\angle 11 = \underline{\hspace{2cm}}$ |
| 5) $m\angle 8 = \underline{\hspace{2cm}}$  | 6) $m\angle 5 = \underline{\hspace{2cm}}$  |
| 7) $m\angle 3 = \underline{\hspace{2cm}}$  | 8) $m\angle 14 = \underline{\hspace{2cm}}$ |

9)

To solve for  $x$  in the diagram below, John used the equation  $4x + 10 = 42$ .

Write out the theorem or postulate that allows him to do so.



10) To solve for  $x$  in the diagram below, Jenna used the equation  $4x - 10 + 50 = 180$ .

Write out the theorem or postulate that allows her to do so.

