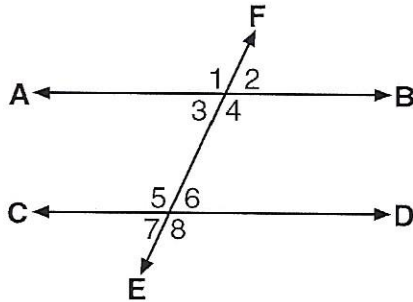


Name: \_\_\_\_\_  
Mrs. Roumbos

Date: \_\_\_\_\_  
8R Period \_\_\_\_\_

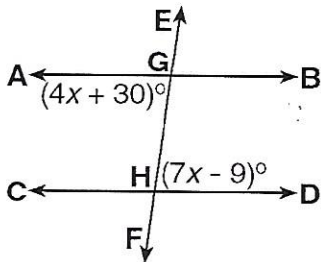
Classwork

- 1) In the accompanying diagram,  $\overline{AB} \parallel \overline{CD}$ ,  $\overline{EF}$  is transversal, and  $m\angle 1 = 110^\circ$ .

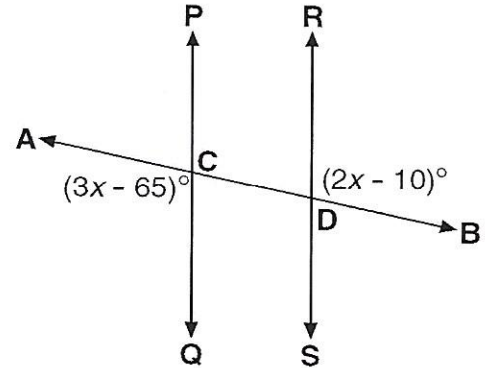


What is  $m\angle 7$ ?

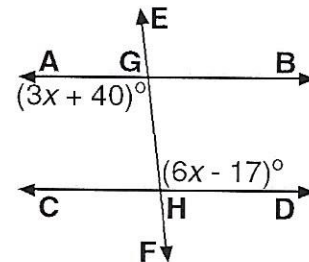
- 2) In the accompanying diagram, parallel lines  $\overline{AB}$  and  $\overline{CD}$  are intersected by transversal  $\overline{EF}$  at  $G$  and  $H$ , respectively. If  $m\angle AGH = (4x + 30)^\circ$  and  $m\angle GHD = (7x - 9)^\circ$ , what is the value of  $x$ ?



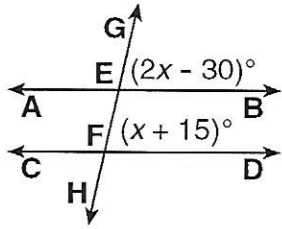
- 3) In the accompanying diagram,  $\overline{AB}$  intersects  $\overline{PQ}$  and  $\overline{RS}$  at  $C$  and  $D$ , respectively. If  $\overline{PQ} \parallel \overline{RS}$ ,  $m\angle RDB = (2x - 10)^\circ$ , and  $m\angle QCA = (3x - 65)^\circ$ , find  $x$ .



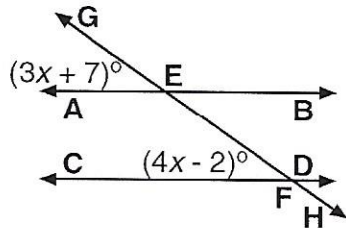
- 4) In the accompanying diagram, transversal  $\overline{EF}$  intersects parallel lines  $\overline{AB}$  and  $\overline{CD}$  at  $G$  and  $H$ , respectively. If  $m\angle AGH = (3x + 40)^\circ$  and  $m\angle GHD = (6x - 17)^\circ$ , what is the value of  $x$ ?



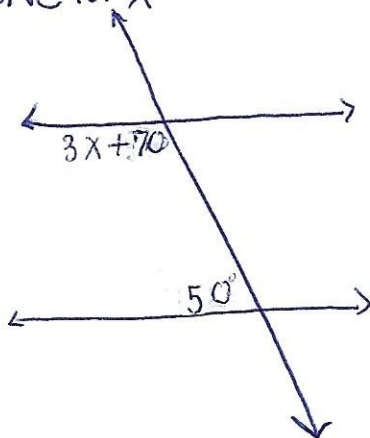
- 5) In the accompanying diagram, parallel lines  $\overline{AB}$  and  $\overline{CD}$  are cut by transversal  $\overline{GH}$  at E and F, respectively. If  $m\angle GEB = (2x - 30)^\circ$  and  $m\angle EFD = (x + 15)^\circ$ , find the value of  $x$ .



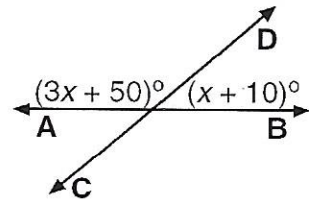
- 6) In the accompanying diagram, parallel lines  $\overline{AB}$  and  $\overline{CD}$  are intersected by transversal  $\overline{GH}$  at points E and F, respectively. If  $m\angle AEG$  is  $(3x + 7)^\circ$  and  $m\angle CFE$  is  $(4x - 2)^\circ$ , find  $x$ .



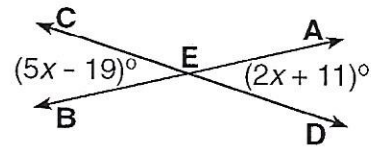
7) Solve for  $x$



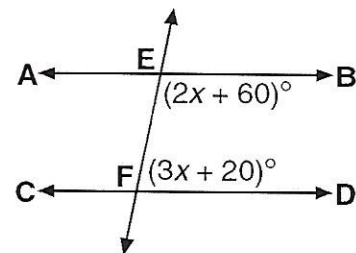
- 8) In the accompanying diagram, the adjacent angles formed by intersecting lines  $\overline{AB}$  and  $\overline{CD}$  have measures  $(3x + 50)^\circ$  and  $(x + 10)^\circ$ , respectively. Find  $x$ .



- 9) In the accompanying diagram,  $\overline{AB}$  and  $\overline{CD}$  intersect at F. If  $m\angle AED = (2x + 11)^\circ$  and  $m\angle CEB = (5x - 19)^\circ$ , find the value of  $x$ .



- 10) In the accompanying diagram,  $\overline{AB}$  is parallel to  $\overline{CD}$ , and  $\overline{EF}$  is a transversal.



If  $m\angle BEF = (2x + 60)^\circ$ , and  $m\angle DFE = (3x + 20)^\circ$ , what is  $m\angle BEF$ ?