

EDUCATIONAL ASSIGNMENT for JOSEPH JOHN WUNDERLICH for 11th grade

This assignment covers the following Educational Objectives (Subjects marked with a "■" are the main subject, and those marked with an "□" are secondary subjects):

- Geometry

Solve the following problems. Use a pencil.

Find the angle measure.

7. $\angle A$ is a complement of $\angle B$, and $m\angle A = 11^\circ$. Find $m\angle B$.

$$\begin{array}{r} 810 \\ \cancel{90} \\ -11 \\ \hline 79 \end{array} \quad m\angle B = 79^\circ$$

8. $\angle A$ is a supplement of $\angle B$, and $m\angle B = 122^\circ$. Find $m\angle A$.

$$\begin{array}{r} 180 \\ \cancel{180} \\ -122 \\ \hline 58 \end{array} \quad m\angle A = 58^\circ$$

9. $\angle C$ is a complement of $\angle D$, and $m\angle C = 88^\circ$. Find $m\angle D$.

$$\begin{array}{r} 90 \\ \cancel{90} \\ -88 \\ \hline 2 \end{array} \quad m\angle D = 2^\circ$$

Think of each segment in the diagram as part of a line.

9. Name a plane that appears parallel to plane ABC .

E, D, F

10. Name a line that is perpendicular to plane ABD .

A, C

11. Name a line that is perpendicular to plane AEC .

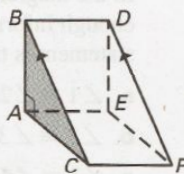
A, B

12. Name a line that is skew to \overrightarrow{BC} .

E, D

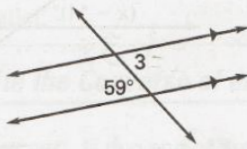
13. Name a line that is parallel to \overrightarrow{BC} .

D, F



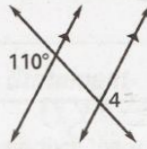
Find the measure of the numbered angle.

4.



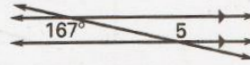
$$m\angle 3 = 59^\circ$$

5.



$$m\angle 4 = 110^\circ$$

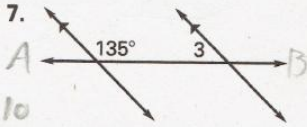
6.



$$m\angle 5 = 167^\circ$$

Find the measure of the numbered angle.

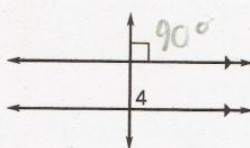
7.



$$\begin{array}{r} 180^\circ \\ -135^\circ \\ \hline 45^\circ \end{array}$$

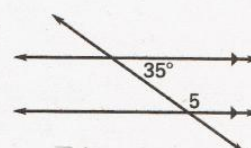
$$m\angle 3 = 45^\circ$$

8.



$$m\angle 4 = 90^\circ$$

9.

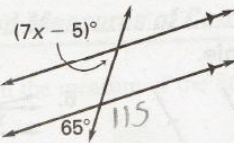


$$\begin{array}{r} 180^\circ \\ -35^\circ \\ \hline 145^\circ \end{array}$$

$$m\angle 5 = 145^\circ$$

Find the value of x.

10.

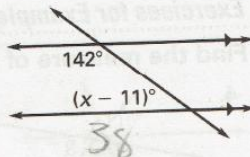


$$(7x - 5) + 65 = 180$$

$$7x + 60 = 175$$

$$7x = 115$$

11.



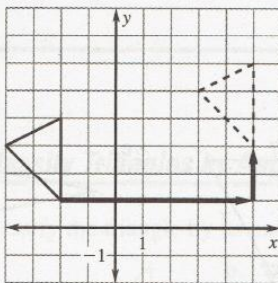
$$(x - 11) + 142 = 180$$

$$x + 131 = 169$$

$$x = 38$$

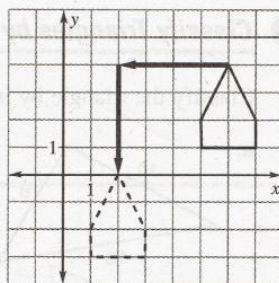
Describe the translation using coordinate notation.

6.



$$(x, y) \rightarrow (x + 7, y + 2)$$

7.



$$(x, y) \rightarrow (x - 4, y - 4)$$