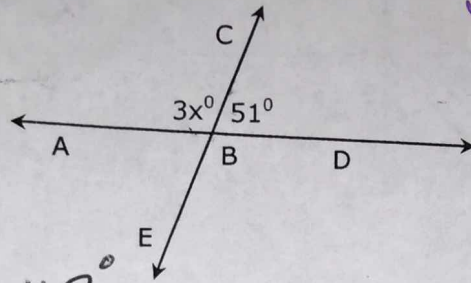


Unit 1 - Geometry Intro.

Notes

Class Notes

Example 1:



What is the value of x ?

$$x = 43$$

What is the measure of angle ABC? Show your work.

$$3 \cdot 43 = 129$$

Answer: 129 degrees

$$\begin{array}{r} 43 \\ 3 \\ \hline 129 \end{array}$$

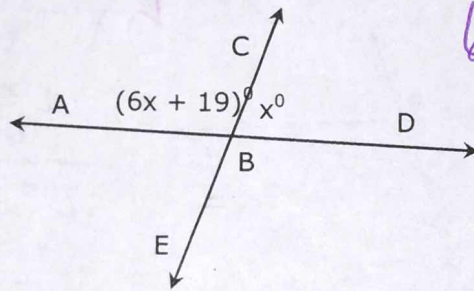
$$\angle ABC + \angle CBD = 180$$

$$\begin{array}{r} 3x + 51 = 180 \\ -51 \quad -51 \\ \hline \end{array}$$

$$\begin{array}{r} 3x = 129 \\ \hline 3 \quad 3 \end{array}$$

$$x = 43$$

Example 2:



Part A What is the value of x ? Show your work.

$$x = 23$$

Part B What is the measure of angle ABC? Show your work.

$$6(23) + 19 = 138 + 19 = 157$$

Answer: 157 degrees

$$\begin{array}{r} 23 \\ 6 \\ \hline 138 \\ 19 \\ \hline 157 \end{array}$$

What are some math words we should use to explain our answer to Part B?

supplementary \angle 's
 Linear \angle 's pairs
 expression
 variable
 equation

$$6x + 19 + x = 180$$

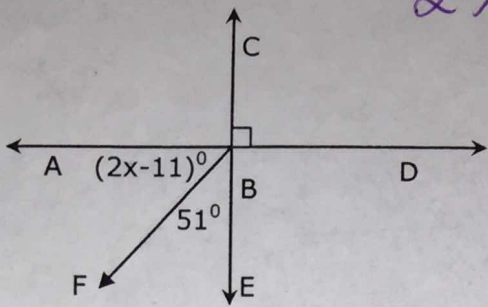
$$\begin{array}{r} 7x + 19 = 180 \\ -19 \quad -19 \\ \hline \end{array}$$

$$\begin{array}{r} 7x = 161 \\ \hline 7 \quad 7 \end{array}$$

$$x = 23$$

Class Notes

Example 3:



$$2x - 11 + 51 = 90$$

$$\begin{array}{r} 2x + 40 = 90 \\ -40 \quad -40 \\ \hline \end{array}$$

$$\frac{2x}{2} = \frac{50}{2}$$

$$x = 25$$

What is the value of x?

$$x = 25$$

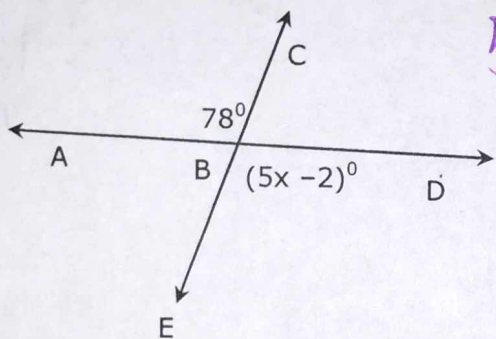
What is the measure of angle ABF? Show your work.

$$2(25) - 11$$

$$\begin{array}{r} 50 - 11 \\ 39 \end{array}$$

Answer: 39 degrees

Example 4:



$$5x - 2 = 78$$

$$\begin{array}{r} +2 \quad +2 \\ \hline 5x = 80 \\ \frac{5x}{5} = \frac{80}{5} \end{array}$$

$$x = 16$$

Part A What is the value of x? Show your work.

$$x = 16$$

Part B What is the measure of angle DBE? Show your work.

Answer: 78 degrees

$$\begin{array}{l} 5(16) - 2 = \angle DBE \\ 80 - 2 = 78^\circ \end{array}$$

What are some math words we should use to explain our answer to Part B?

Vertical \angle 's

expression

Congruent

equation

Angle notation