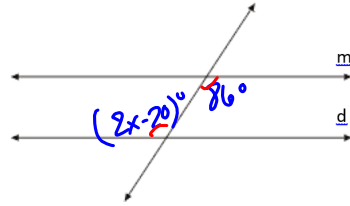


1. Think About the Process

a. Write an equation in terms of x that will make $d \parallel m$.

- A. $2x - 20 = 86$
- B. $2x = 66$
- C. $180 - (2x - 20) = 86$
- D. $2x - 20 = 4$



b. Find the value of x for which $d \parallel m$.

$$\begin{aligned} 2x - 20 &= 86 \\ +20 & \quad +20 \\ \hline 2x &= 106 \\ \frac{2x}{2} &= \frac{106}{2} \\ x &= 53 \end{aligned}$$

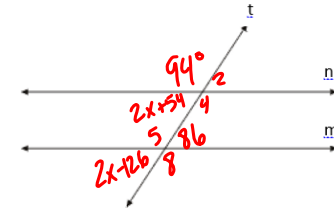
2. Multiple Representations Using alternate interior angles, write an equation in terms of x that will make line $m \parallel n$.

a. Which of the following equations will make line $m \parallel n$?

- A. $2x + 54 = 86$
- B. $2x - 126 = 94$
- C. $2x + 54 = 94$
- D. $2x - 126 = 86$

b. Find the value of x that makes line $m \parallel n$.

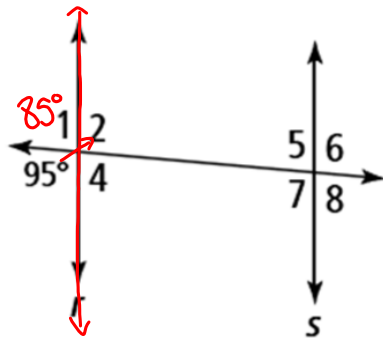
$x = 16$ $2x + 54 = 86$



c. Find the measure of a different pair of angles that will make line $m \parallel n$. Justify your reasoning.

Close and Check.

What is the measure of EVERY angle?



- $\angle 1 = 85^\circ$
- $\angle 2 = 95^\circ$
- $\angle 4 = 85^\circ$
- $\angle 5 = 85^\circ$
- $\angle 6 = 95^\circ$
- $\angle 7 = 95^\circ$
- $\angle 8 = 85^\circ$

$180 - 95 = 85$

5. Complete Example #4.

Got It?

What is $m\angle F$?

$180 = x - 3 + x + 5 + x - 2$
 $190 = 3x - 3 + 5 - 2$
 $180 = \frac{3x}{3}$
 $60^\circ = x$

$m\angle F = 57^\circ$