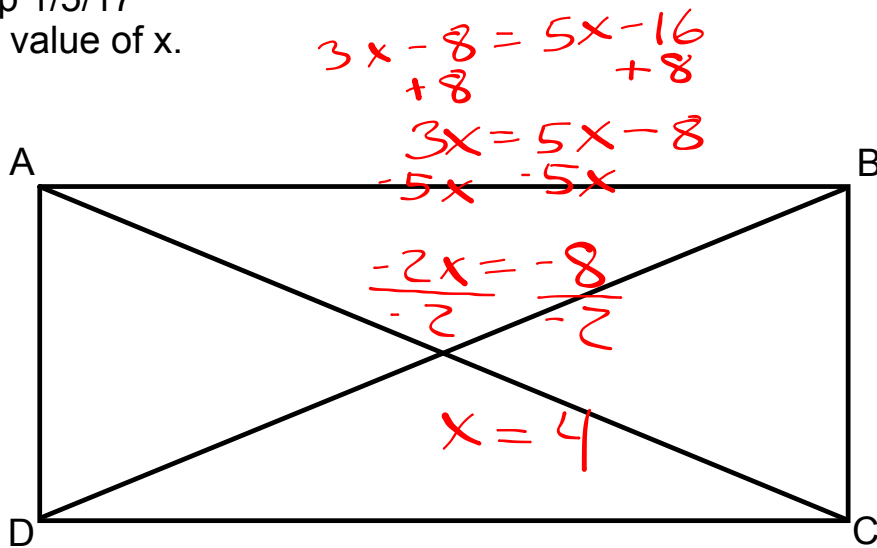


Warm-up 1/5/17
Find the value of x.



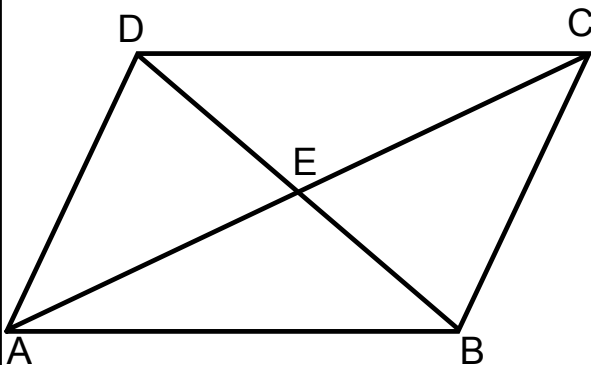
$AC = 3x - 8$

$DB = 5x - 16$

$$\begin{aligned}
 3x - 8 &= 5x - 16 \\
 +8 & \quad +8 \\
 3x &= 5x - 8 \\
 -5x & \quad -5x \\
 -2x &= -8 \\
 \frac{-2x}{-2} &= \frac{-8}{-2} \\
 x &= 4
 \end{aligned}$$

Pg. 496-499

Parallelogram



~~$m\angle ABC = m\angle BCD = m\angle CDA = m\angle DAB = 90^\circ$~~

$\angle ADC \cong \angle ABC, \angle DAB \cong \angle DCB$

$\overline{AB} \parallel \overline{DC}, \overline{AD} \parallel \overline{BC}$

$\overline{AB} \cong \overline{DC}, \overline{AD} \cong \overline{BC}$

$\overline{AE} \cong \overline{EC}, \overline{DE} \cong \overline{EB}$

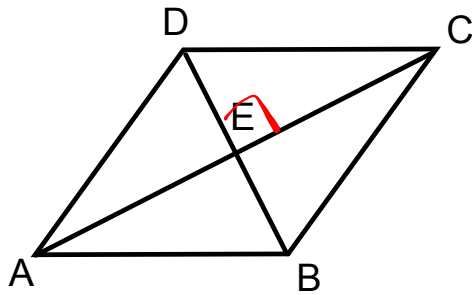
~~$\overline{AC} \cong \overline{DB}$~~

~~$\angle DAC = \angle BAC, \angle BCA = \angle DCA$~~

~~$\angle ADB = \angle CDB, \angle ABD = \angle CBD$~~

~~$m\angle AEB = m\angle BEC = m\angle CED = m\angle DEA = 90^\circ$~~

Pg. 500-502



~~$m\angle ABC = m\angle BCD = m\angle CDA = m\angle DAB = 90^\circ$~~

$\angle ADC \cong \angle ABC, \angle DAB \cong \angle DCB$

$\overline{AB} \parallel \overline{DC}, \overline{AD} \parallel \overline{BC}$

$\overline{AB} \cong \overline{DC} \cong \overline{AD} \cong \overline{BC}$

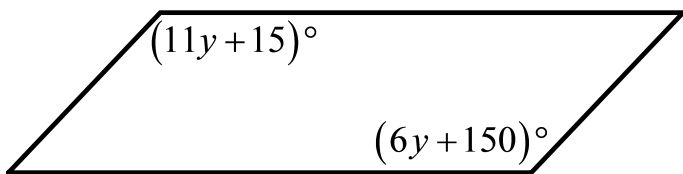
$\overline{AE} \cong \overline{EC}, \overline{DE} \cong \overline{EB}$

~~$\overline{AC} \cong \overline{DB}$~~

$\angle DAC \cong \angle BAC, \angle BCA \cong \angle DCA$

$\angle ADB \cong \angle CDB, \angle ABD \cong \angle CBD$

$(m\angle AEB = m\angle BEC = m\angle CED = m\angle DEA = 90^\circ)$



$6z + 18 = 90$

$6z = 72$

$z = 12$

$11y + 15 = 6y + 150$
 $-6y \quad -6y$

$5y + 15 = 150$
 $-15 \quad -15$

$5y = 135$

$y = 27$

$(6z + 18)^\circ$

