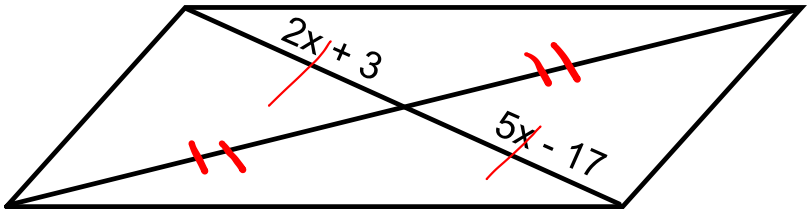
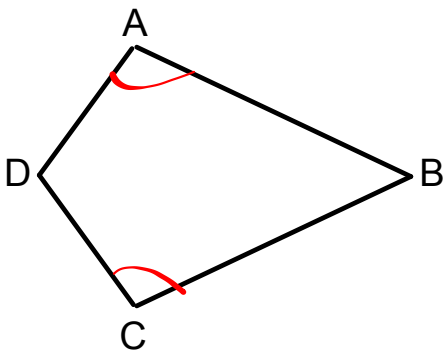
Warm-up 1/12/17
Find the value of x for this parallelogram.

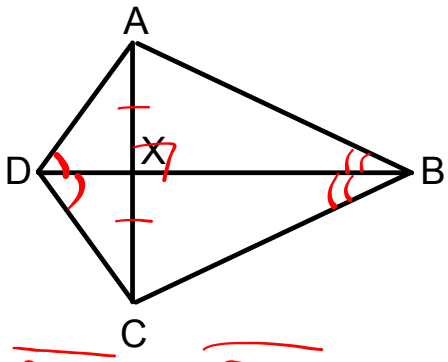


$2x+3=5x-17$
$-3 \quad -3$
$2x=5x-20$
$-5x \quad -5x$
$-3x=-20$
$x=\frac{-20}{-3}=6\frac{2}{3}$

Pg. 510-511
Kite

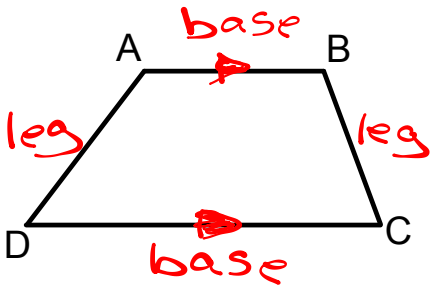


$\angle A \cong \angle C$



$\overline{AC} \perp \overline{DB}$
$\angle ADB \cong \angle CDB$
$\angle CBD \cong \angle ABD$
$\overline{AX} \cong \overline{XC}$

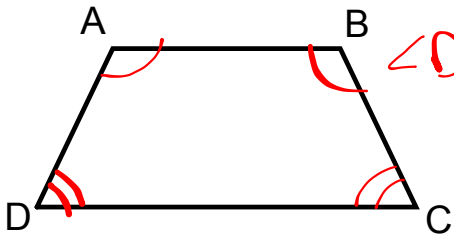
Pg. 513-515
Trapezoids



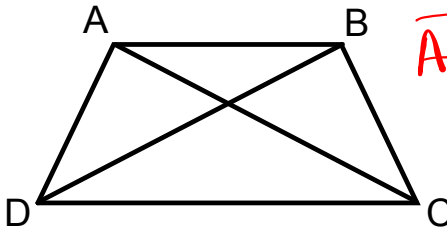
$m\angle A + m\angle D = 180$

$m\angle B + m\angle C = 180$

Isosceles Trapezoids



$\angle A \cong \angle B$
$\angle D \cong \angle C$



$\overline{AC} \cong \overline{BD}$

Pg. 516
Conditional
If A, then B.

Converse
If B, then A.

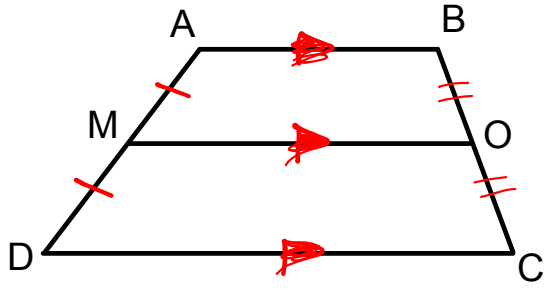
Biconditional
A if and only if B.

Conditional
If a trapezoid is isosceles, then the diagonals are congruent.

Converse
If the diagonals of a trapezoid are congruent, then it is isosceles.

Biconditional
A trapezoid is isosceles if and only if the diagonals are congruent.

Pg. 519-521
Midsegments of Trapezoids



$MO = \frac{AB + CD}{2}$

Pg. 523
1.

$12^2 + 10^2 = c^2$

$244 = c^2$

$\sqrt{244} = c$

$15.6 \approx c$

$12^2 + 26^2 = c^2$

$820 = c^2$

$28.6 \approx \sqrt{820} = c$

$2(15.6) + 2(28.6)$

88.4