

# HW Key

Thursday, November 9, 2017 9:19 AM

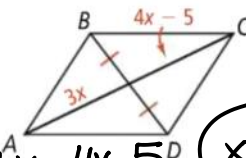


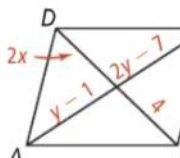
Day 9 HW

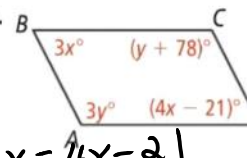
p. 372 #7 – 11 odd, 13 – 15, 22 – 24, 29

**Algebra** For what values of  $x$  and  $y$  must  $ABCD$  be a parallelogram?

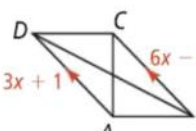
See Problems 1 and 2.

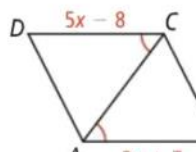
7.   $3x = 4x - 5$   $x = 5$

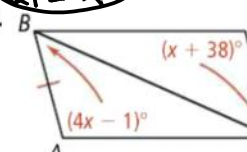
8. 

9.   $3x = 4x - 21$   $21 = x$

$3y = y + 78$   
 $2y = 78$   
 $y = 39$

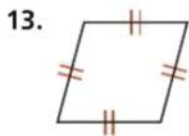
10. 

11. 

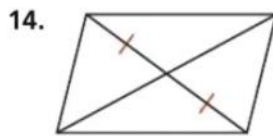
12. 

$5x - 8 = 2x + 7$   
 $3x = 15$   $x = 5$

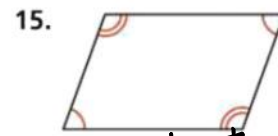
Can you prove that the quadrilateral is a parallelogram based on the given information? Explain.



Yes opposite sides  $\cong$

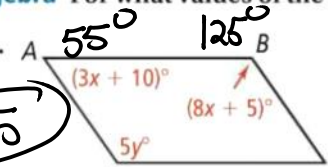


Not enough info

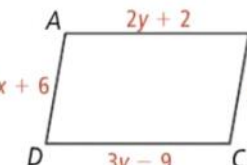


Yes both pairs of opposite  $\cong$

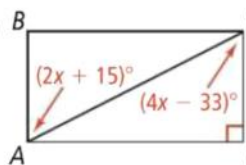
**Algebra** For what values of the variables must  $ABCD$  be a parallelogram?

22.   $3x + 10 + 8x + 5 = 180$   
 $11x + 15 = 180$   
 $11x = 165$   
 $x = 15$

$y = 125$   
 $y = 25$

23. 

$2y + 2 = 3y - 9$   
 $11 = y$

24. 

$3x + 6 = 15$   
 $2x = 9$   
 $x = 3$

$2x + 15 = 4x - 33$   
 $48 = 2x$   
 $24 = x$

29. From which set of information can you conclude that  $RSTW$  is a parallelogram?

- (A)  $\overline{RS} \parallel \overline{WT}$ ,  $\overline{BS} \cong \overline{ST}$   
(B)  $\overline{RS} \parallel \overline{WT}$ ,  $\overline{ST} \cong \overline{RW}$

- (C)  $\overline{RS} \cong \overline{ST}$ ,  $\overline{RW} \cong \overline{WT}$   
(D)  $\overline{RZ} \cong \overline{TZ}$ ,  $\overline{SZ} \cong \overline{WZ}$

