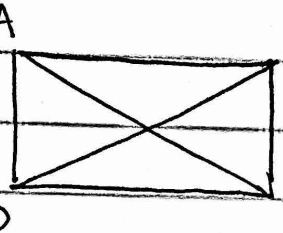
Day 03 Skills Practice KEY

1. 

$2X+13=4X-1$

$14=2X$

$7=X$

$DB=4(7)-1$

$28-1$

$DB=27$

2. $X+3=3X-19$

$22=2X$

$11=X$

$AC=X+3$

$11+3$

$AC=14$

3. $AE=EC$ $\quad 3X+3=5X-15$

$18=2X$

$9=X$

$AC=3X+3+5X-15$

$8X-12$

$8(9)-12$

$72-12=60$

4. $DE=AE$ $\quad 6X-7=4X+9$

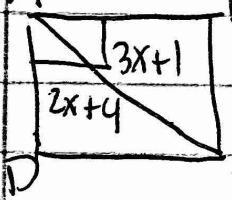
$2X=16$

$X=8$

$DB=2(DE)$

$=2(6\cdot8-7)$

$2(41)=82$

5. 

$2X+4+3X+1=90$

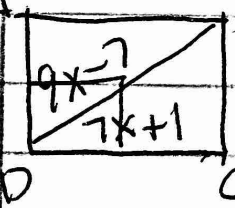
$5X+5=90$

$5X=85$

$X=17$

$m\angle BAC=3(17)+1$

$=52°$

6. 

$9X-7+7X+1=90$

$16X-6=90$

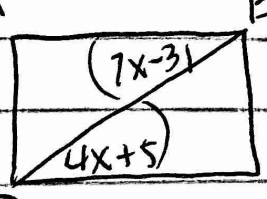
$16X=96$

$X=6$

$m\angle BDC=7(6)+1$

$42+1$

$=43°$

7. 

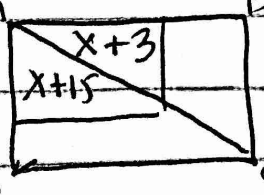
$7X-31=4X+5$

$3X=36$

$X=12$

$m\angle ABD=7(12)-31$

$=53°$

8. 

$X+3+X+15=90$

$2X+18=90$

$2X=72$

$X=36$

$m\angle BAC=(36)+3$

$39°$

BACK:

1. $UZ = ZS$ $\quad X+21 = 3X-15$ $\quad US = 2UZ$

$36 = 2X$ $\quad US = 2(18+21)$

$X = 18$ $\quad 2(39) = 78$

2. $RZ = ZS$ $\quad 3X+9 = 6X-28$ $\quad UZ = RZ$

$36 = 3X$ $\quad = 3(12)+8$

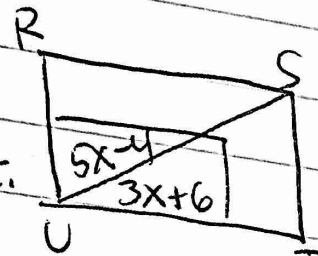
$X = 12$ $\quad = 44$

3. $RT = RZ \cdot 2$ $\quad 5X+8 = 2(4X+1)$ $\quad ZT = RZ$

$5X+8 = 8X+2$ $\quad = 4(2)+1$

$6 = 3X$ $\quad = 9$

$X = 2$

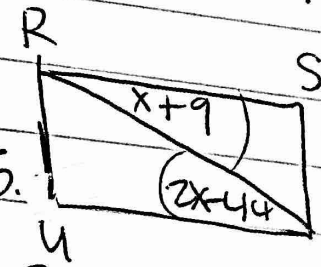
4. 

$5X-4+3X+6 = 90$ $\quad m\angle SUT = 3(11)+6$

$8X+2 = 90$ $\quad 33+6$

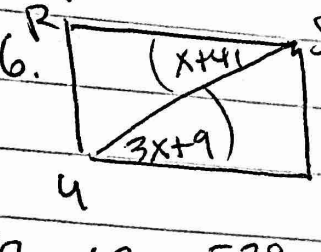
$8X = 88$ $\quad 39°$

$X = 11$

5. 

$X+9 = 2X-44$ $\quad m\angle UTR = 2(53)-44$

$53 = X$ $\quad = 62°$

6. 

$X+41 = 3X+9$ $\quad m\angle RSU = (16)+41$

$32 = 2X$ $\quad = 57°$

$X = 16$

7. $m\angle 2 = 53°$

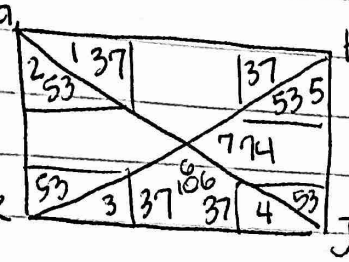
8. $m\angle 3 = 37°$

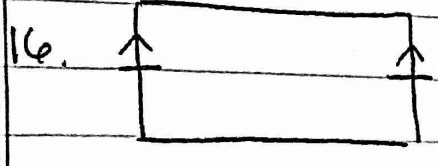
9. $m\angle 4 = 37°$

10. $m\angle 5 = 53°$

11. $m\angle 6 = 106°$

12. $m\angle 7 = 74°$



16. 

Not enough properties because these are guaranteeing it is a parallelogram, but there is no proof there are right angles, so it actually look like