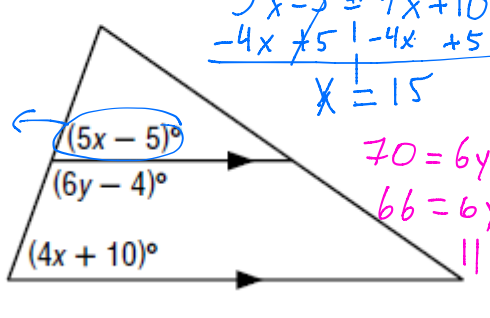


UNIT 1  
ASSIGNMENT #16

Solving with Transversals Review

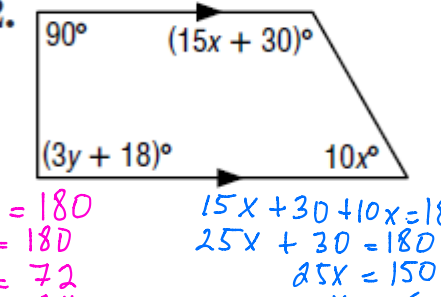
OBJECTIVE: S.W.B.A.T. solve for the missing variable knowing the properties of transversals.

Find  $x$  and  $y$  in each figure.

1. 

Handwritten calculations:  
 $5x - 5 = 4x + 10$   
 $-4x + 5 \quad -4x + 5$   
 $x = 15$   
 $5(15) - 5 = 70$   
 $70 = 6y - 4$   
 $66 = 6y$   
 $11 = y$

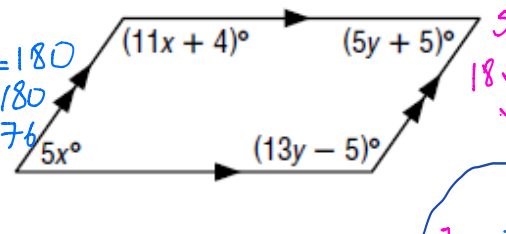
$x = 15$ ,  $y = 11$

2. 

Handwritten calculations:  
 $3y + 18 + 90 = 180$   
 $3y + 108 = 180$   
 $3y = 72$   
 $y = 24$   
 $15x + 30 + 10x = 180$   
 $25x + 30 = 180$   
 $25x = 150$   
 $x = 6$

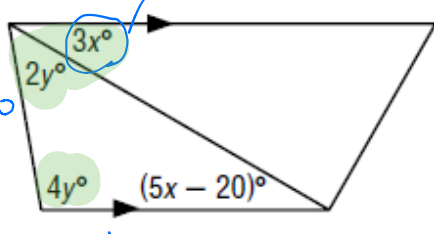
$x = 6$ ,  $y = 24$

Find  $x$  and  $y$  in each figure.

3. 

Handwritten calculations:  
 $11x + 4 + 5x = 180$   
 $16x + 4 = 180$   
 $16x = 176$   
 $x = 11$   
 $5x + 5 + 13y - 5 = 180$   
 $18y = 180$   
 $y = 10$

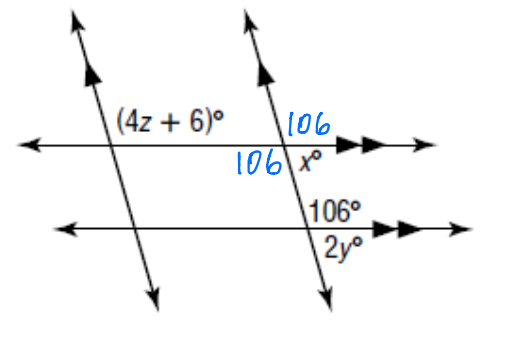
$x = 11$ ,  $y = 10$

4. 

Handwritten calculations:  
 $3x = 5x - 20$   
 $-2x = -20$   
 $x = 10$   
 $2y + 30 + 4y = 180$   
 $6y + 30 = 180$   
 $6y = 150$   
 $y = 25$

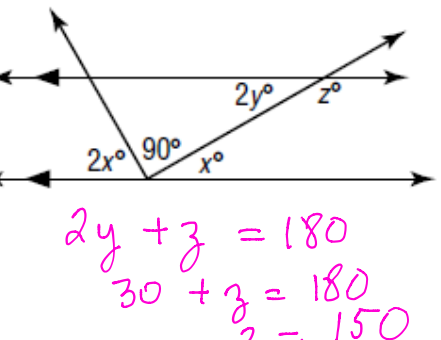
$x = 10$ ,  $y = 25$

Find  $x$ ,  $y$ , and  $z$  in each figure.

5. 

Handwritten calculations:  
 $106 + x = 180$   
 $x = 74$   
 $x = 2y$   
 $74 = 2y$   
 $34 = y$   
 $4z + 6 = 106$   
 $4z = 100$   
 $z = 25$

$x = 74$ ,  $y = 34$ ,  $z = 25$

6. 

Handwritten calculations:  
 $2y + z = 180$   
 $30 + z = 180$   
 $z = 150$   
 $2x + 90 + x = 180$   
 $3x + 90 = 180$   
 $3x = 90$   
 $x = 30$   
 $2y = x$   
 $2y = 30$   
 $y = 15$

$x = 30$ ,  $y = 15$ ,  $z = 150$