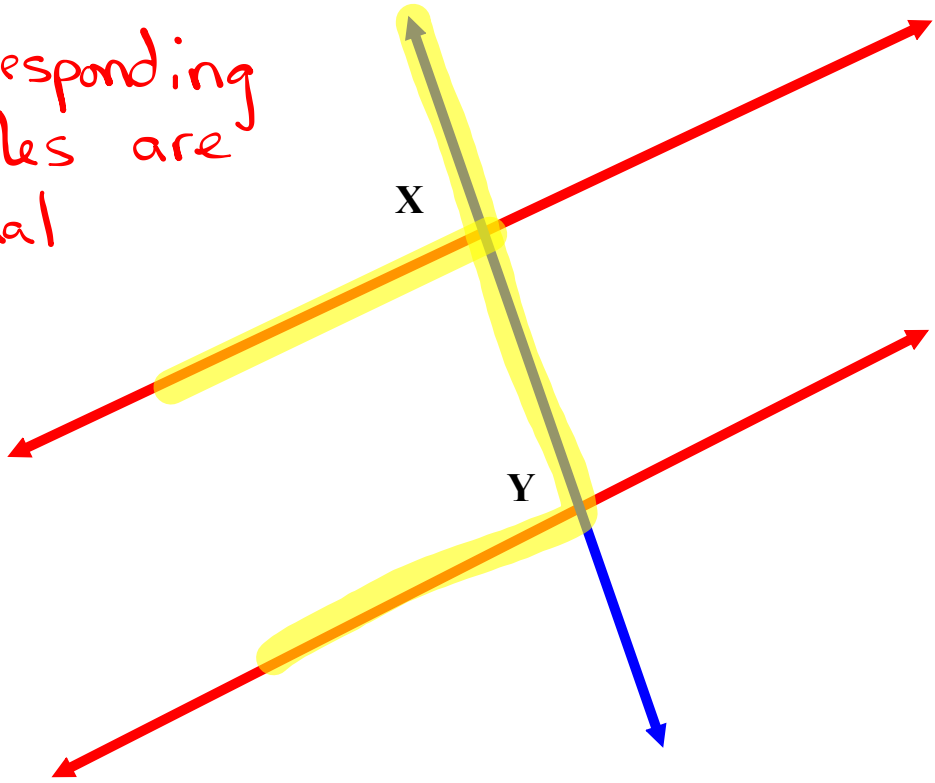
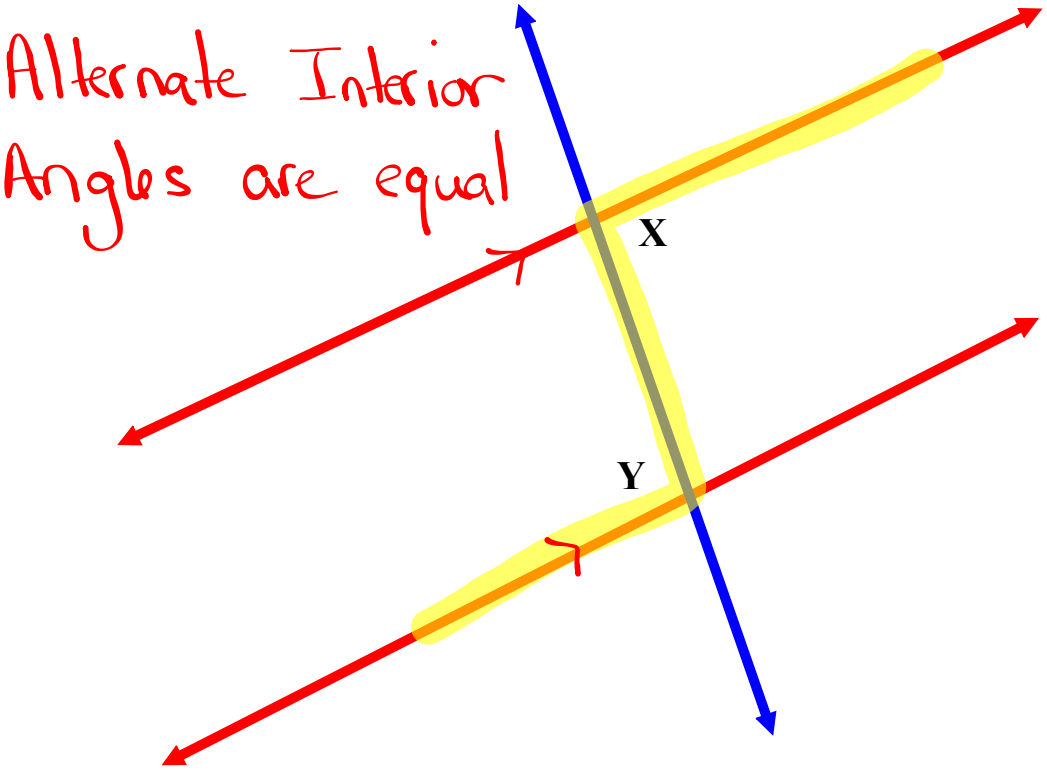
State the Rule

Corresponding Angles are equal



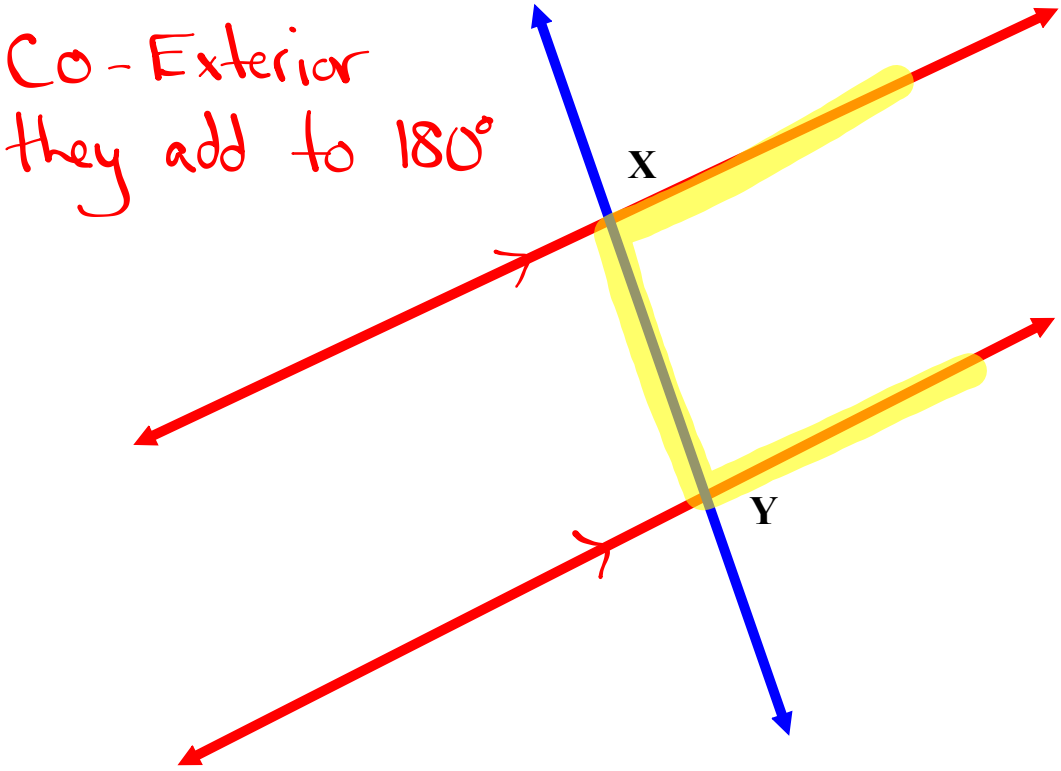
State the Rule

Alternate Interior Angles are equal



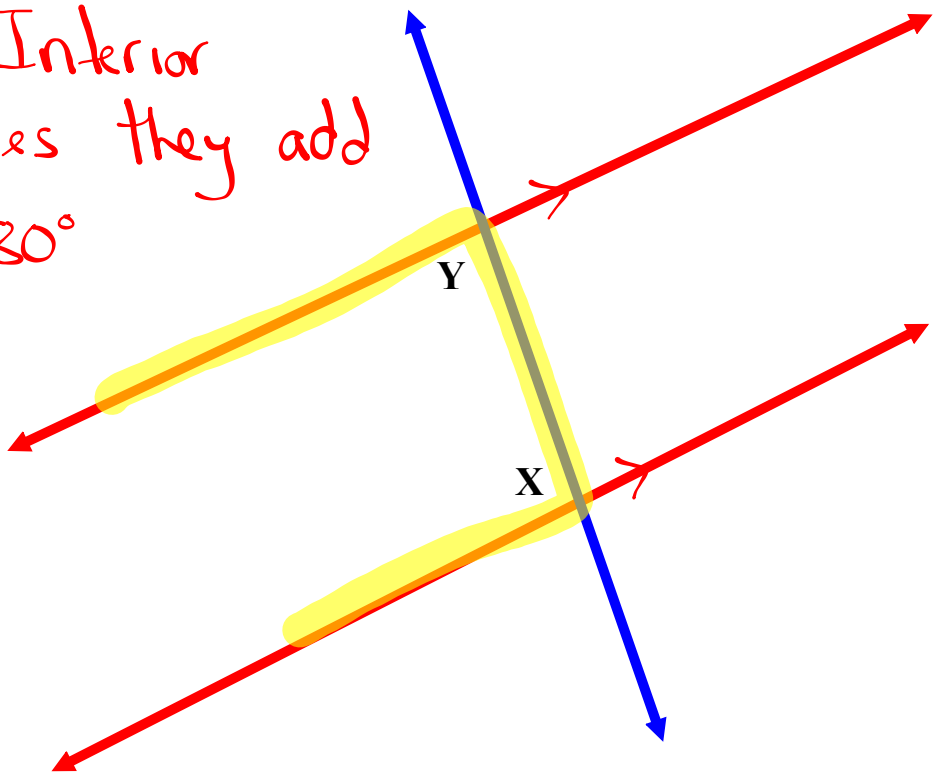
State the Rule

Co-Exterior
they add to 180°

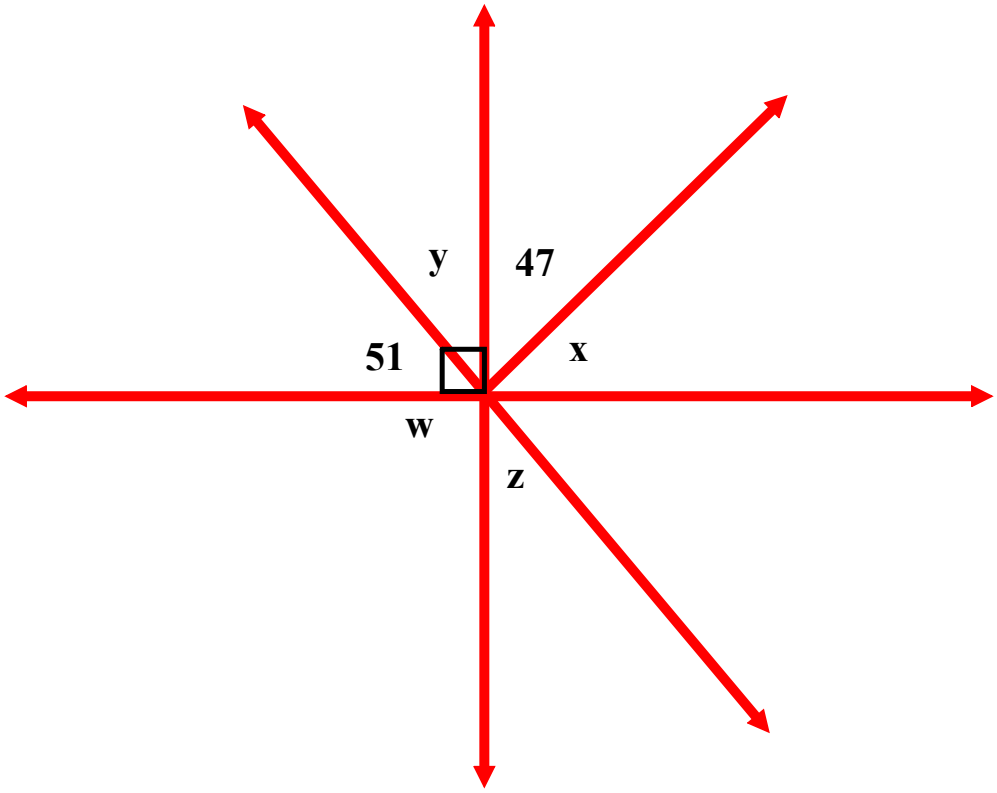


State the Rule

Co-Interior Angles they add to 180°



Solve for the missing angles



(i) $y + 51 = 90$

$y = 90 - 51$

$y = 39°$

(ii) $z = y$

$z = 39°$

(iii) $x + 47 = 90$

$x = 90 - 47$

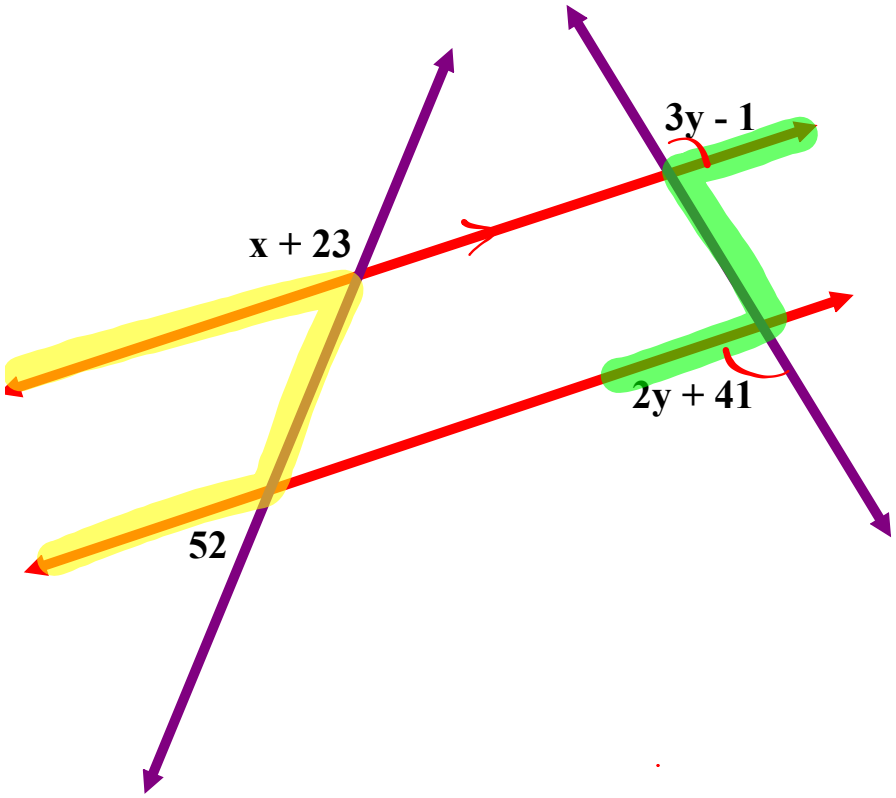
$x = 43°$

$w + 90 = 180$

$w = 180 - 90$

$w = 90°$

Solve for x & y



Solve for x:

$x + 23 + 52 = 180°$

$x + 75 = 180°$

$x = 180 - 75$

$x = 105°$

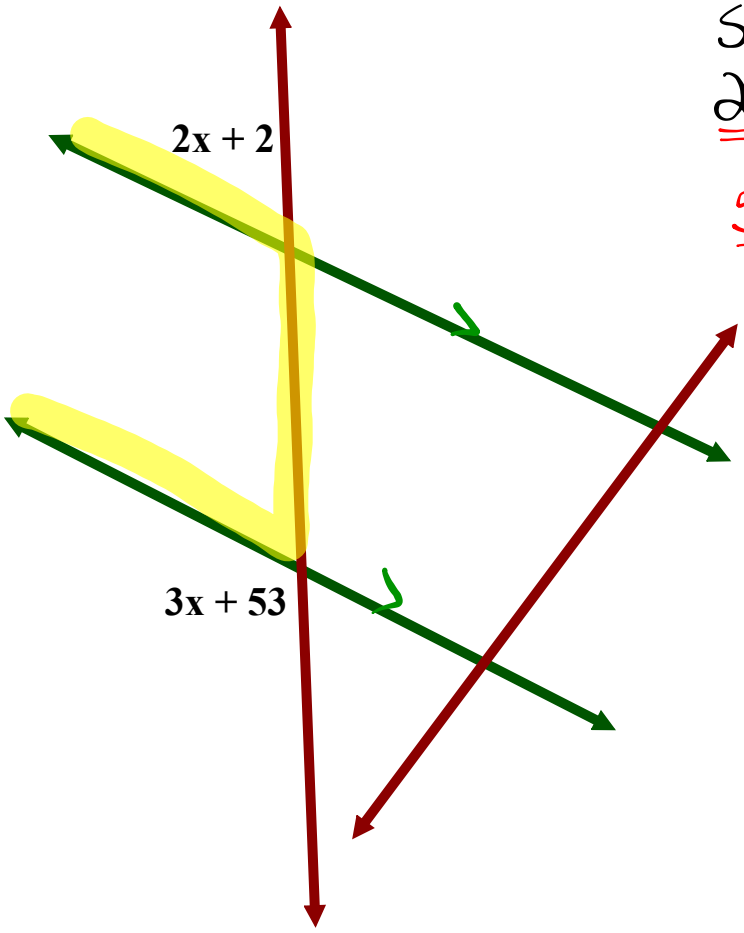
Solve for y:

$3y - 1 = 2y + 41$

$3y - 2y = 41 + 1$

$y = 42°$

Solve for x and then find the indicated angles



Solve for x:

$2x+2+3x+53=180$

$5x+55=180$

$5x=180-55$

$\frac{5x}{5}=\frac{125}{5}$

$x=25$

Angle #1

$2x+2$

$2(25)+2$

$50+2$

52°

Angle #2

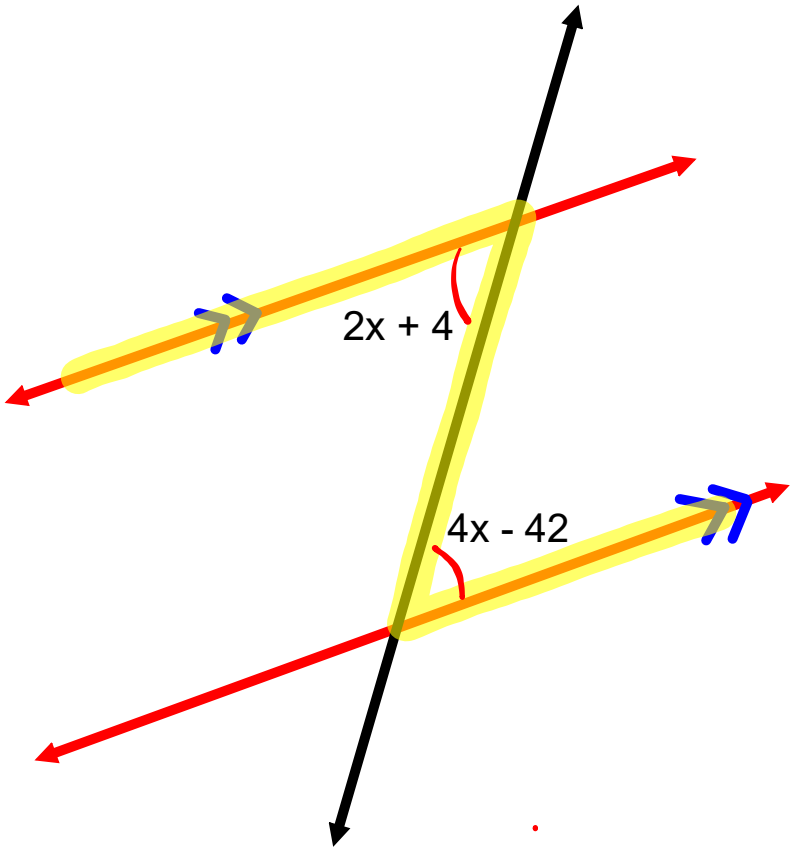
$3x+53$

$3(25)+53$

$75+53$

128°

Solve for x and then find the indicated angles



Solve for x:

$2x + 4 = 4x - 42$

$4 + 42 = 4x - 2x$

$\frac{46}{2} = \frac{2x}{2}$

$23 = x$

Angle 1

$2x + 4$

$2(23) + 4$

$46 + 4$

50°

Angle 2

$4x - 42$

$4(23) - 42$

$92 - 42$

50°

Homework

Finish Worksheet

Name: Answer Key

Equations and Transversals

Each figure consists of two parallel lines and a transversal. Find the values of x and y.

1. $x =$ 26°

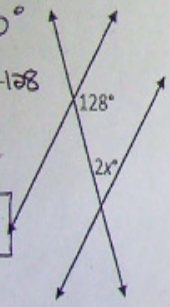
(Co-Interior)

① $2x + 128 = 180°$

$2x = 180 - 128$

$\frac{2x}{2} = \frac{52}{2}$

$x = 26°$



2. $x =$ 54°

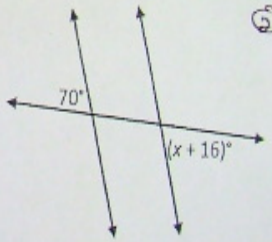
(Alternate Exterio

② $(x+16)° = 70°$

$x + 16 = 70°$

$x = 70 - 16$

$x = 54°$



3. $x =$ 28°

$y =$ 112°

4. $x =$ 108°

$y =$ 22.2°

(Supplementary)

④ $x + 72° = 180°$