

Properties of Parallel and Perpendicular Lines

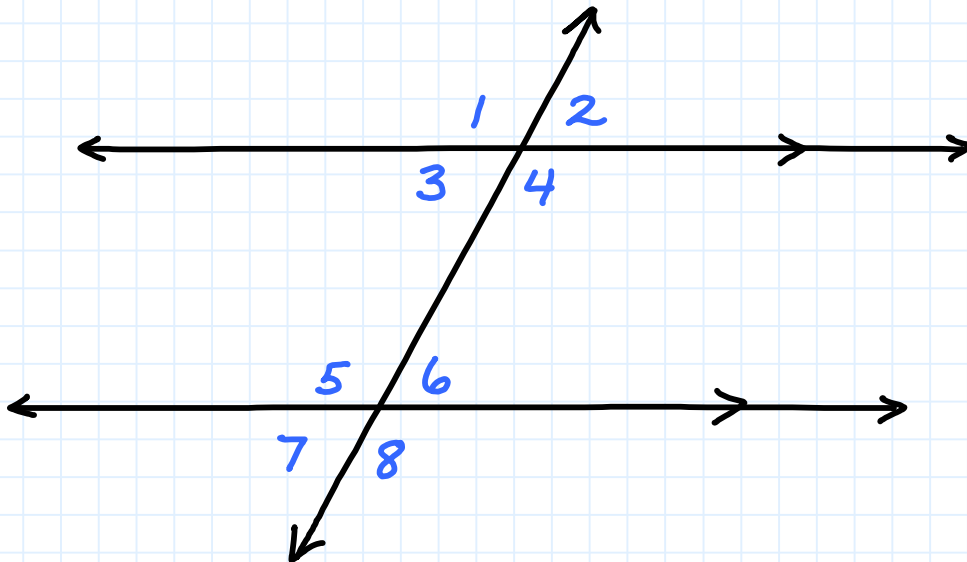


Overview of problems



Example Set: A

Use the information in the diagram to answer the questions



List the angles supplementary to $\angle 5$

Name a pair of vertical angles

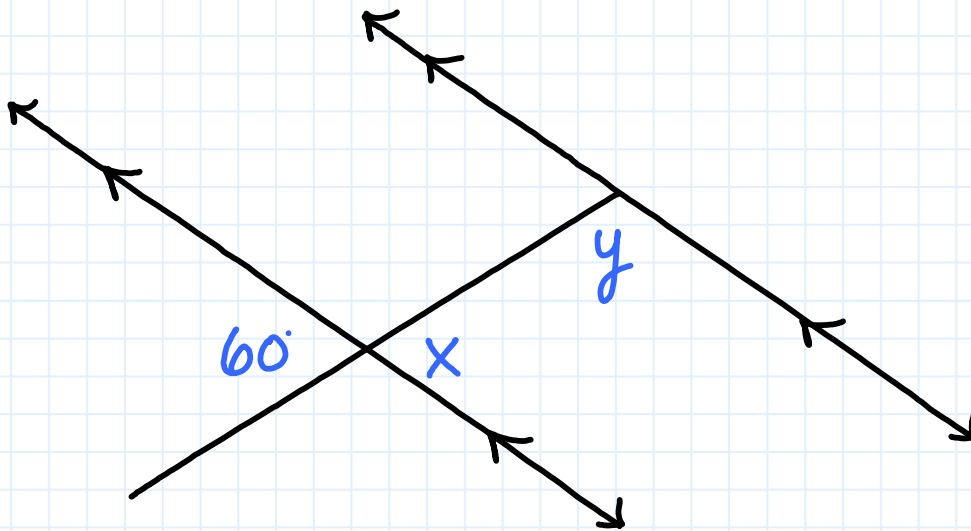
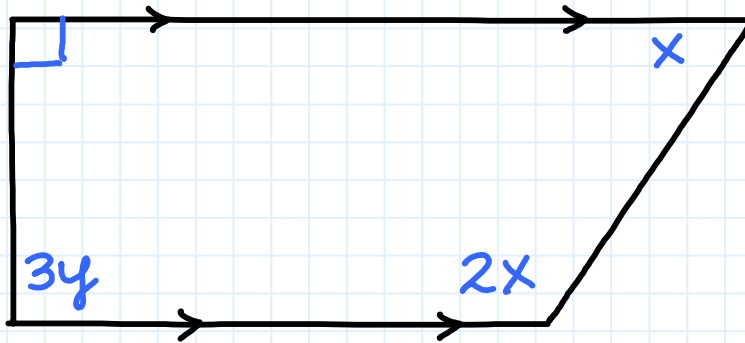
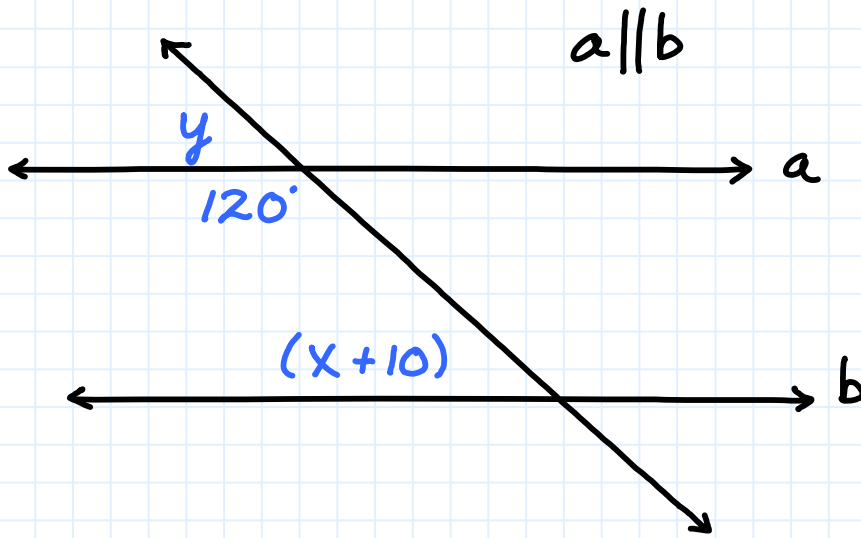
What angles are congruent to $\angle 8$

Given angle 3 is 40 degrees, what is the measure of angle 5?



Example Set: B

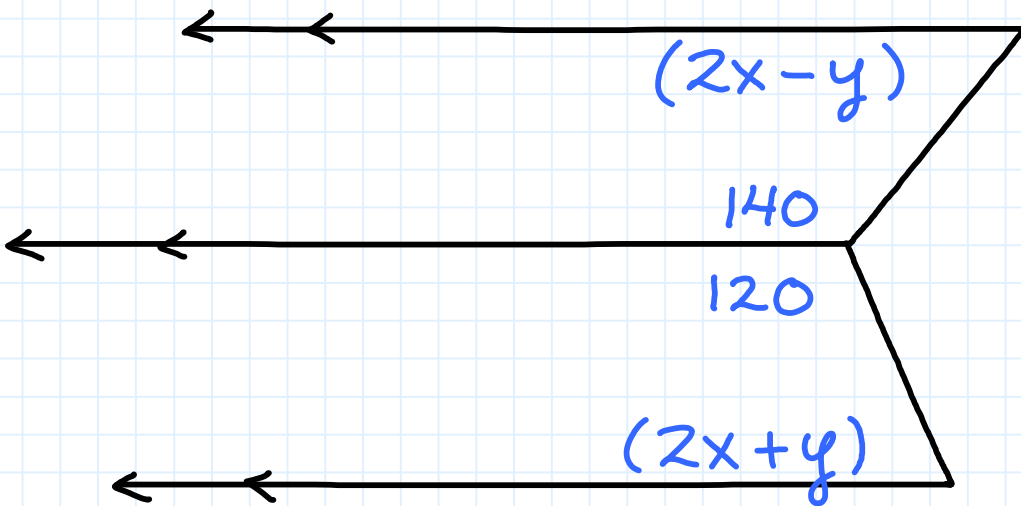
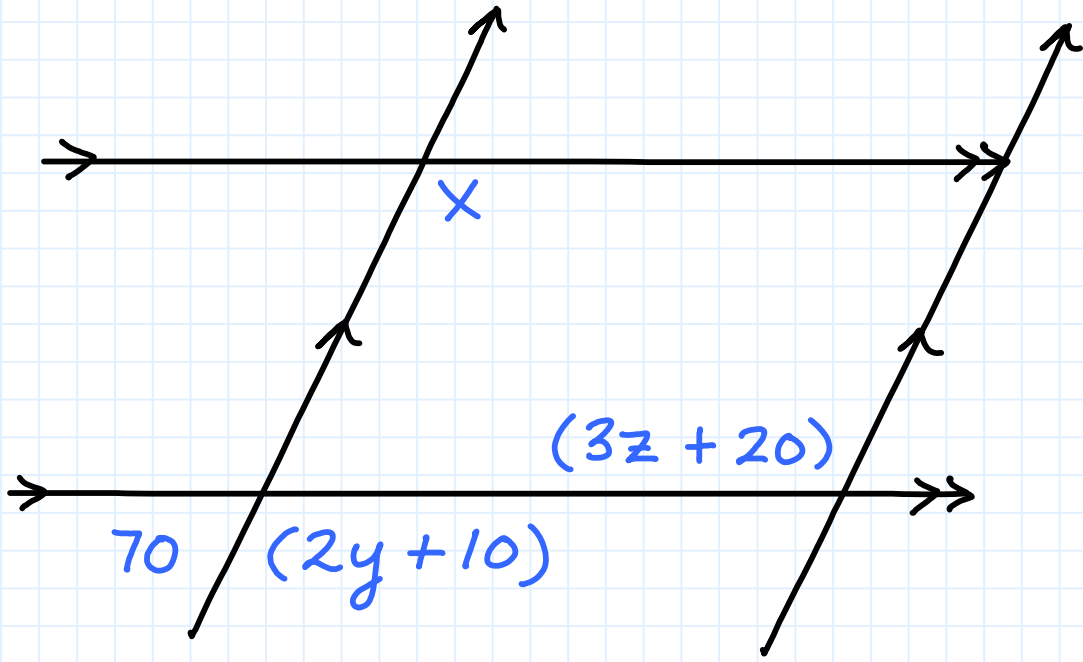
Find the values of the variables





Example Set: C

Find the values of the variables



Properties of Parallel and Perpendicular Lines

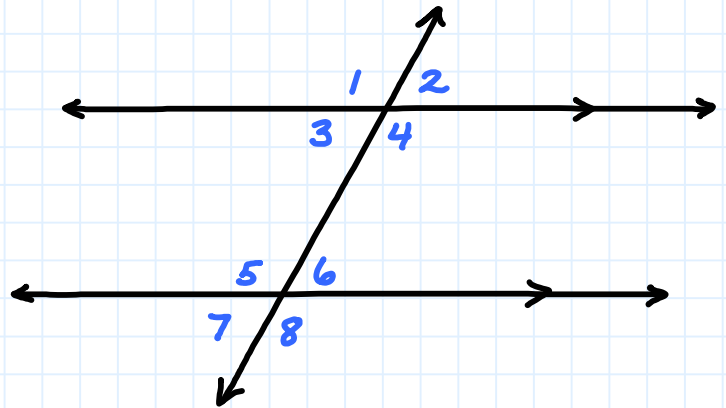


Overview of problems- KEY



Example Set: A

Use the information in the diagram to answer the questions



List the angles supplementary to $\angle 5$ $\angle 3, \angle 2, \angle 6, \angle 7$

Name a pair of vertical angles $\angle 1, \angle 4$

What angles are congruent to $\angle 8$ $\angle 4, \angle 5, \angle 1$

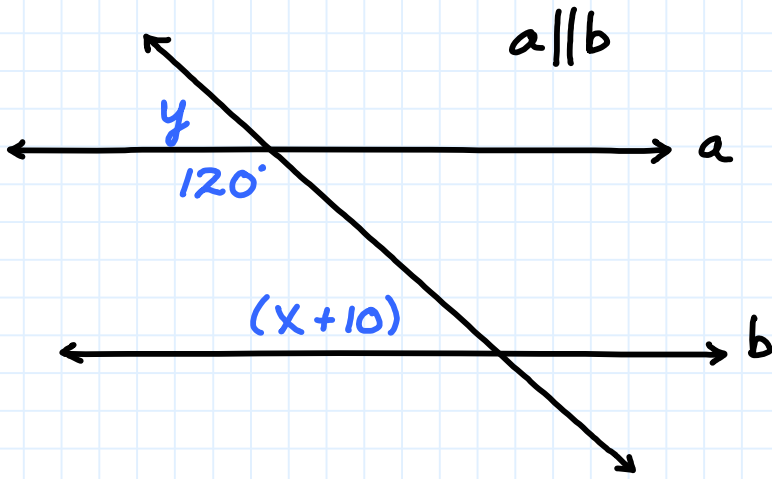
Given angle 3 is 40 degrees, what is the measure of angle 5?

$$\angle 5 = 140^\circ$$

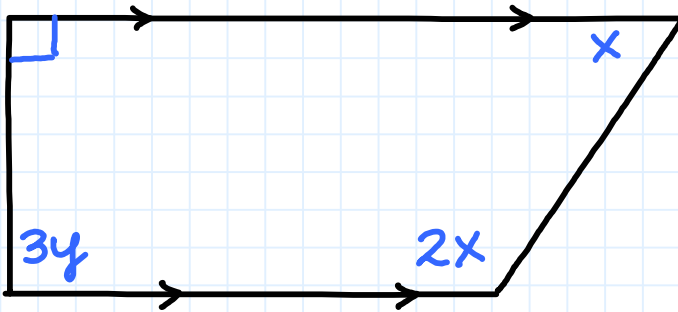


Example Set: B

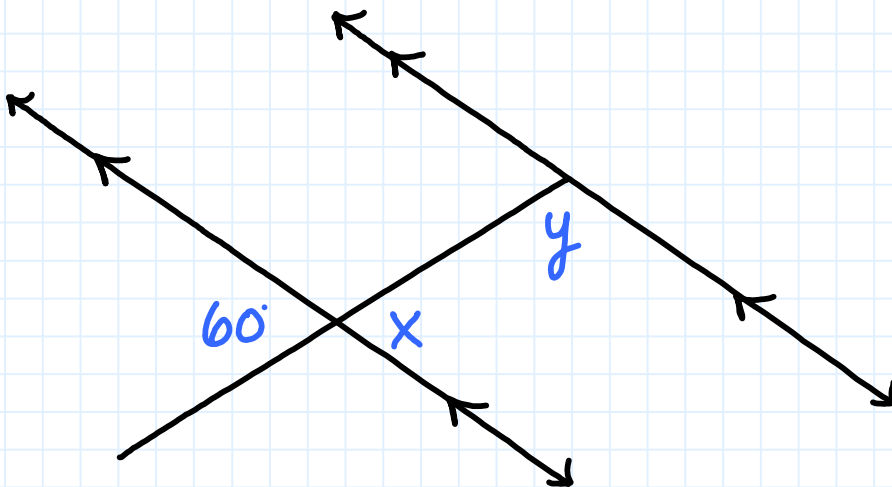
Find the values of the variables



$$x = 50^\circ$$
$$y = 60^\circ$$



$$x = 60^\circ$$
$$y = 30^\circ$$

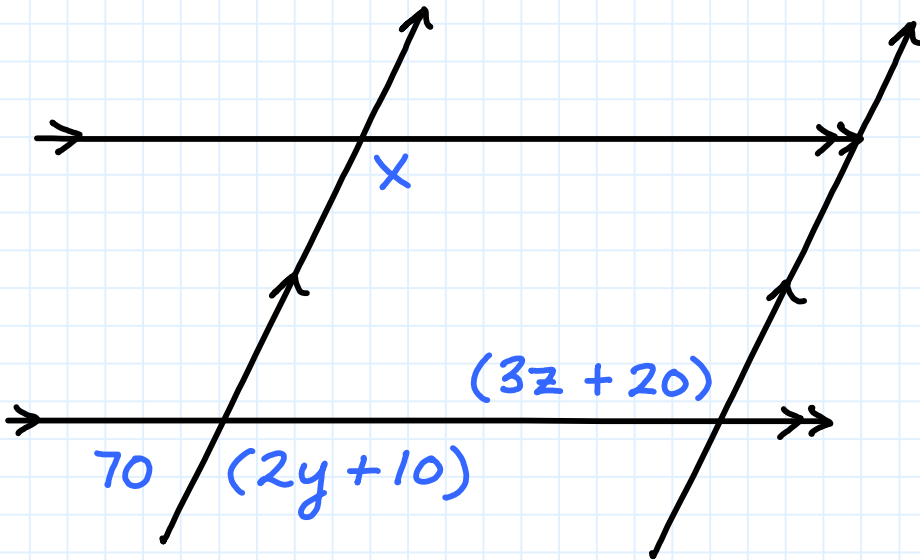


$$x = 60^\circ$$
$$y = 120^\circ$$



Example Set: C

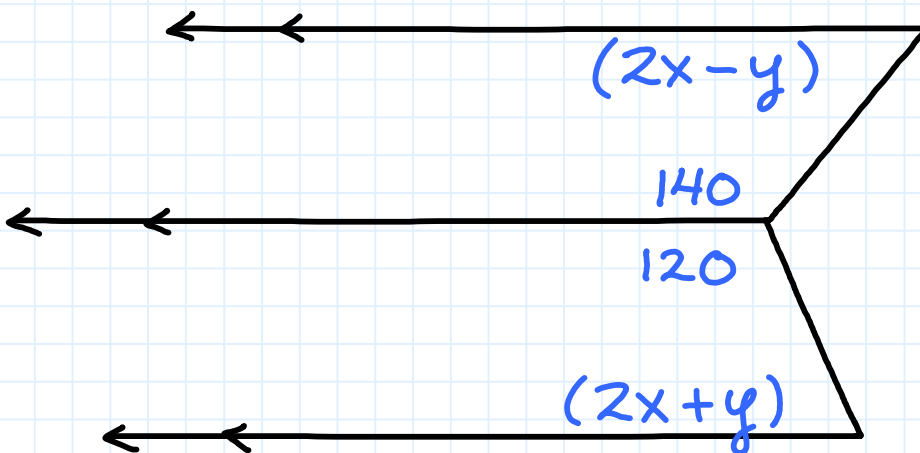
Find the values of the variables



$$x = 110^\circ$$

$$y = 50^\circ$$

$$z = 30^\circ$$



$$x = 25^\circ$$

$$y = 10^\circ$$