

Vertical  $\angle$ s are  $\cong$   
linear pairs are suppl.

def of  $\perp$

def of Right  $\angle$

def of compl.

def of suppl.

def of  $\angle$  bisector

angle addition

segment addition

def. of midpoint

Substitution / transitive

def of segment bisector

// lines form  $\cong$  corr.  $\angle$ s

// lines form  $\cong$  alt. int  $\angle$ s

// lines form  $\cong$  alt. ext.  $\angle$ s

// lines form suppl. con. int.  $\angle$ s

$\cong$  corr.  $\angle$ s form // lines

$\cong$  alt. int  $\angle$ s form // lines

$\cong$  alt ext.  $\angle$ s form // lines

Suppl. con. int.  $\angle$ s form // lines

Algebra justifications

subtraction

addition

division

multiplication