

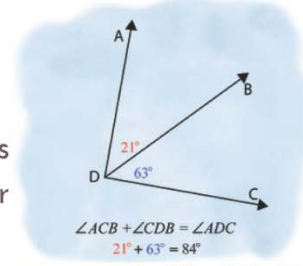
Name :

Class :



# Angle Postulate

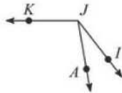
The sum of two adjacent angle measures will be equal to the measure of the larger angle they form.



## Find Angle Addition Postulate

1)

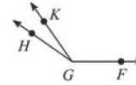
Find  $x$  if  $m\angle LJA = 3x - 2$ ,  $m\angle LJK = 128^\circ$ , and  $m\angle AJK = 11x - 10$ .



10

2)

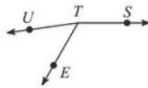
$m\angle KGF = 16x - 3$ ,  $m\angle HGK = 20^\circ$ , and  $m\angle HGF = 18x + 1$ . Find  $x$ .



8

3)

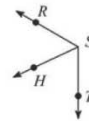
$m\angle ETU = 3x + 19$ ,  $m\angle STE = 120^\circ$ , and  $m\angle STU = 16x - 4$ . Find  $x$ .



11

4)

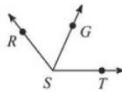
Find  $x$  if  $m\angle HSR = x + 63$ ,  $m\angle TSH = x + 73$ , and  $m\angle TSR = 120^\circ$ .



-8

5)

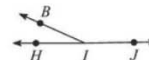
Find  $x$  if  $m\angle RST = 13x - 2$ ,  $m\angle GST = 66^\circ$ , and  $m\angle RSG = 5x + 12$ .



10

6)

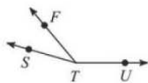
$m\angle HIJ = 179^\circ$ ,  $m\angle HIB = x + 33$ , and  $m\angle BIJ = x + 164$ . Find  $x$ .



-9

7)

Find  $m\angle STU$  if  $m\angle FTU = x + 130$ ,  $m\angle STF = 34^\circ$ , and  $m\angle STU = 2x + 164$ .



164°

8)

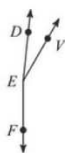
Find  $m\angle EDC$  if  $m\angle EDR = 4x + 6$ ,  $m\angle EDC = 37x + 4$ , and  $m\angle RDC = 130^\circ$ .



152°

9)

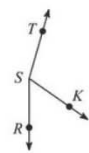
$m\angle VEF = 6 + 24x$ ,  $m\angle DEV = 4x$ , and  $m\angle DEF = 174^\circ$ . Find  $m\angle VEF$ .



150°

10)

Find  $m\angle TSK$  if  $m\angle TSR = 164^\circ$ ,  $m\angle TSK = 121 + x$ , and  $m\angle KSR = x + 67$ .



109°