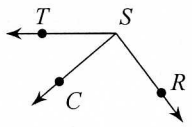
Int Math

Name_____

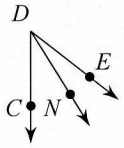
6-3 Angle Addition Postulate (ver2)_hw

Date_____ Period____

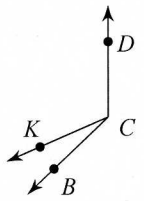
1) $m\angle RST = -2 + 43x$, $m\angle CST = 40°$, and $m\angle RSC = 30x - 3$. Find x.



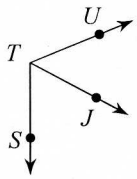
2) Find x if $m\angle EDN = 2 + 6x$, $m\angle EDC = 52°$, and $m\angle NDC = 5 + 9x$.



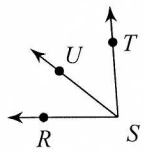
3) $m\angle BCD = 133°$, $m\angle KCD = x + 120$, and $m\angle BCK = x + 27$. Find x.



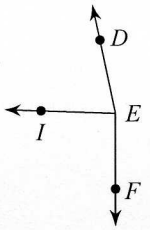
4) Find x if $m\angle UTS = 17x - 7$, $m\angle JTS = 62°$, and $m\angle UTJ = 7x + 1$.



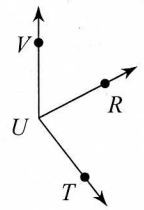
5) Find x if $m\angle RSU = 3x + 2$, $m\angle RST = -10 + 8x$, and $m\angle UST = 48°$.



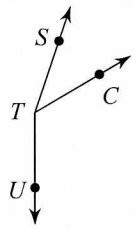
6) $m\angle IED = 37x + 2$, $m\angle FEI = 45x + 2$, and $m\angle FED = 168°$. Find x.



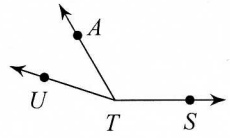
7) $m\angle VUT = 142°$, $m\angle RUT = x + 87$, and $m\angle VUR = x + 71$. Find x.



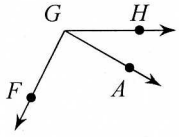
8) Find x if $m\angle STU = 22x + 7$, $m\angle CTU = 120°$, and $m\angle STC = -1 + 6x$.



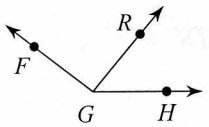
9) $m\angle UTA = 5x - 3$, $m\angle ATS = 120°$, and $m\angle UTS = 17x + 9$. Find x.



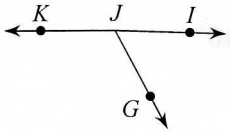
10) Find x if $m\angle AGF = 87°$, $m\angle HGF = 10x + 17$, and $m\angle HGA = 4x - 10$.



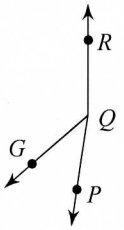
11) $m\angle FGR = 93°$, $m\angle RGH = -5 + 11x$, and $m\angle FGH = 27x + 8$. Find x.



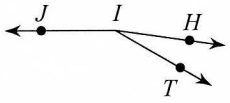
12) $m\angle IJK = 178°$, $m\angle GJK = 119 + x$, and $m\angle IJG = x + 61$. Find x.



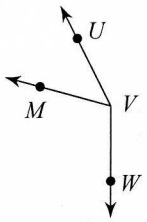
13) $m\angle PQG = 7x - 1$, $m\angle GQR = 130°$, and $m\angle PQR = 27x + 9$. Find x.



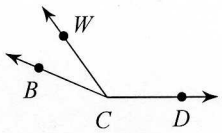
14) Find x if $m\angle HIJ = 172°$, $m\angle HIT = x + 26$, and $m\angle TIJ = x + 154$.



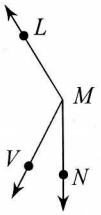
15) $m\angle WVU = 14x + 13$, $m\angle MVU = 48°$, and $m\angle WVM = 9x + 15$. Find x.



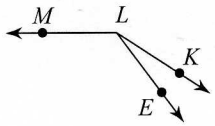
16) $m\angle WCD = x + 133$, $m\angle BCD = 157°$, and $m\angle BCW = 38 + x$. Find x.



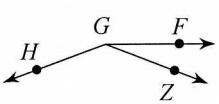
17) Find x if $m\angle VML = x + 131$, $m\angle NML = 148°$, and $m\angle NMV = x + 39$.



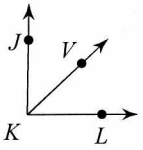
18) $m\angle ELM = 10 + 13x$, $m\angle KLM = 147°$, and $m\angle KLE = 3x - 7$. Find x.



19) Find x if $m\angle ZGH = 14x - 1$, $m\angle FGH = 15x + 10$, and $m\angle FGZ = 21°$.



20) $m\angle VKL = 42x + 1$, $m\angle JKV = 46°$, and $m\angle JKL = 88x + 1$. Find x.



Answers to 6-3 Angle Addition Postulate (ver2)_hw

1) 3 2) 3 3) −7 4) 7
5) 12 6) 2 7) −8 8) 7
9) 9 10) 10 11) 5 12) −1
13) 6 14) −4 15) 10 16) −7
17) −11 18) 9 19) 10 20) 1