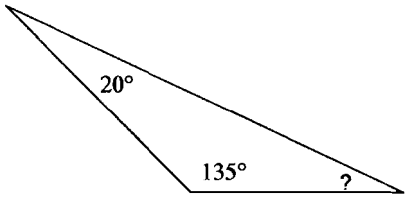
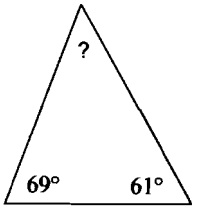
# Triangle Sum & Corresponding Angles/Sides

**Find the measure of each angle indicated.**

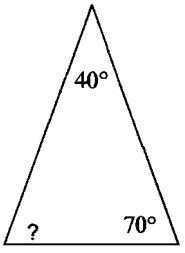
1)



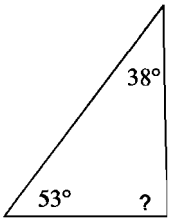

2)




3)

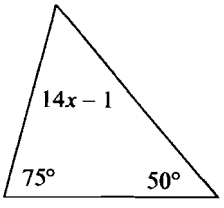



4)

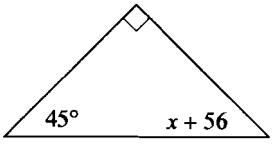



**Solve for $x$.**

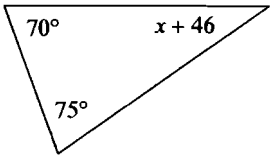
5)



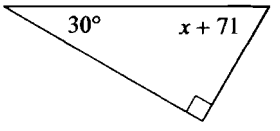

6)




7)

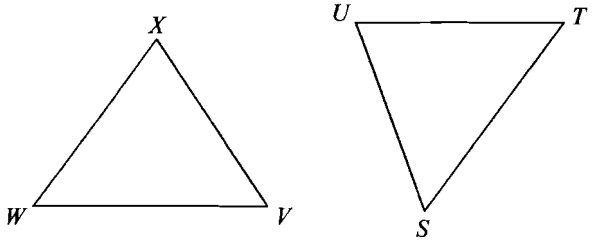



8)



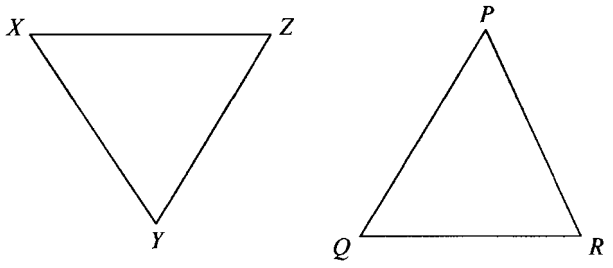

**Complete each congruence statement by naming the corresponding angle or side.**

9) $\triangle VWX \cong \triangle STU$



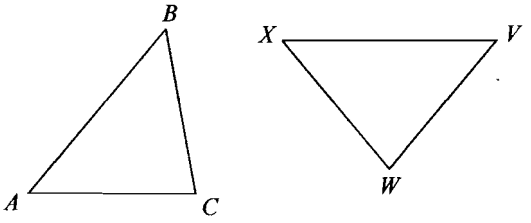

$\overline{WX} \cong ?$

10) $\triangle YXZ \cong \triangle RPQ$



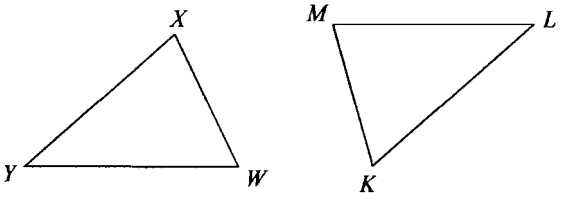

$\overline{ZY} \cong ?$

11) $\triangle ABC \cong \triangle VXW$



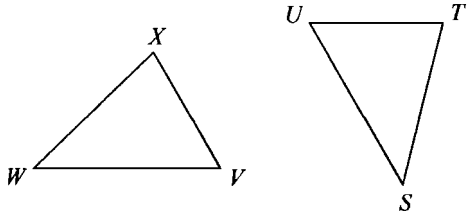

$\angle A \cong ?$

12) $\triangle WYX \cong \triangle KLM$



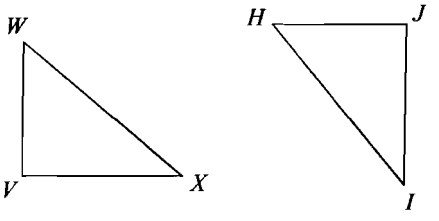

$\angle Y \cong ?$

13) $\triangle WXV \cong \triangle STU$



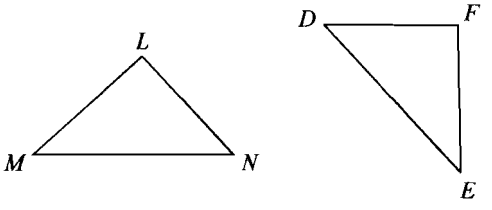

$\angle W \cong ?$

14) $\triangle WXV \cong \triangle HIJ$



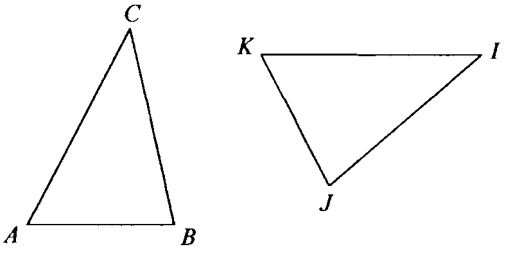

$\overline{VW} \cong ?$

15) $\triangle NML \cong \triangle DEF$



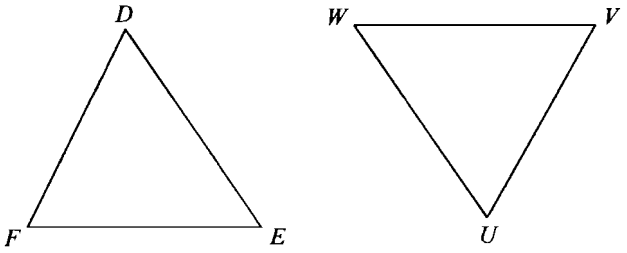

$\overline{NM} \cong ?$

16) $\triangle ACB \cong \triangle KIJ$



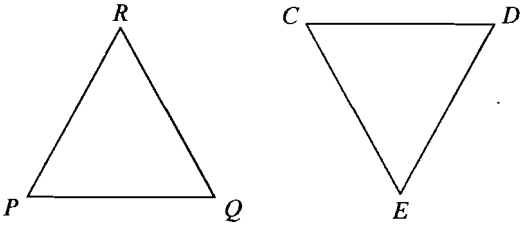

$\angle A \cong ?$

17) $\triangle DEF \cong \triangle VWU$




$\overline{EF} \cong ?$

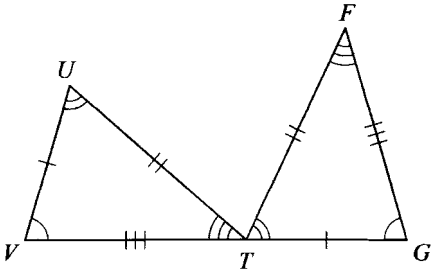
18) $\triangle PRQ \cong \triangle CED$



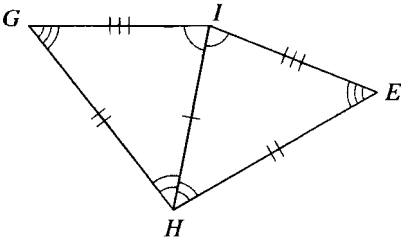

$\overline{QP} \cong ?$

**Write a statement that indicates that the triangles in each pair are congruent.**

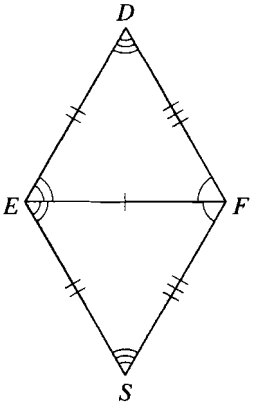
19)



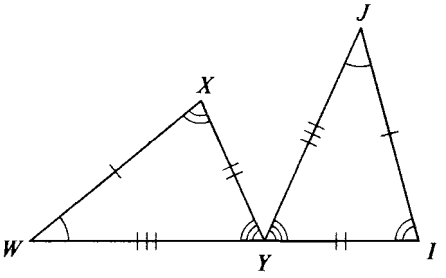

20)



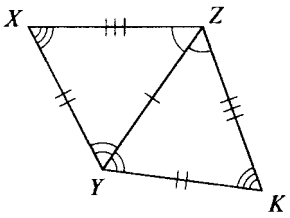

21)




22)

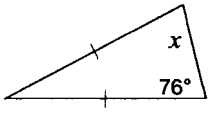


23)

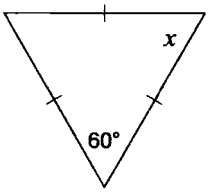



**Find the value of *x*.**

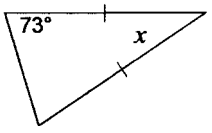
24)



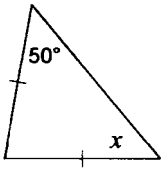

25)



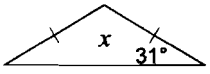

26)



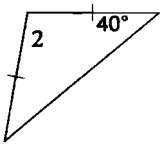

27)



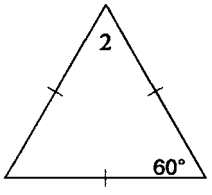

28)



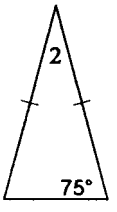

29) $m\angle 2 = 108 + x$



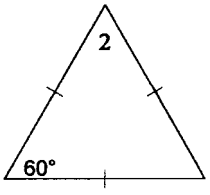

30) $m\angle 2 = 5x + 5$



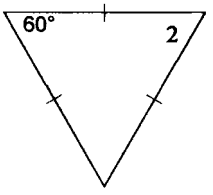

31) $m\angle 2 = 4x + 2$




32) $m\angle 2 = x + 72$




33) $m\angle 2 = 9x - 3$



# Answers to Triangle Sum & Corresponding Angles/Sides

1) 25°
2) 50°
3) 70°
4) 89°
5) 4
6) −11
7) −11
8) −11
9) $\overline{TU}$
10) $\overline{QR}$
11) $\angle V$
12) $\angle L$
13) $\angle S$
14) $\overline{JH}$
15) $\overline{DE}$
16) $\angle K$
17) $\overline{WU}$
18) $\overline{DC}$
19) $\triangle VUT \cong \triangle GTF$
20) $\triangle IHG \cong \triangle IHE$
21) $\triangle FED \cong \triangle FES$
22) $\triangle WXY \cong \triangle JIY$
23) $\triangle ZYX \cong \triangle ZYK$
24) 76°
25) 60°
26) 34°
27) 50°
28) 118°
29) −8
30) 11
31) 7
32) −12
33) 7