

# Finding Angles in Triangles

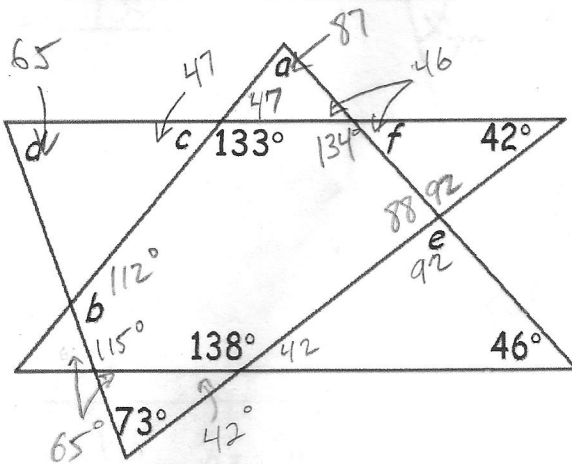
Name \_\_\_\_\_

Date \_\_\_\_\_ Pd \_\_\_\_\_

Using what you know about angles in triangles, parallel lines, and other angle relationships, find the missing angles in each of the following problems. \*Hint - look at ALL of the  $\Rightarrow$ 's in the diagram.\*

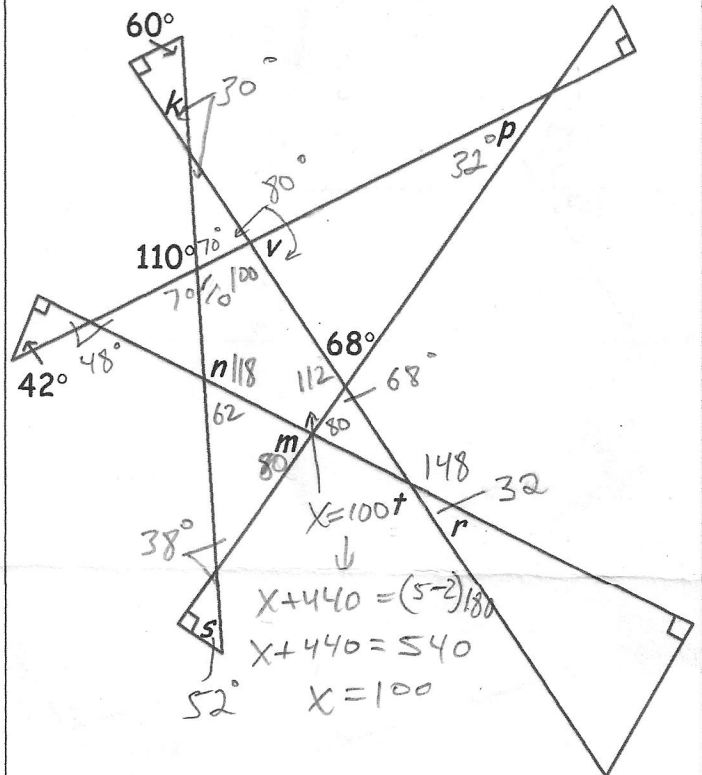
1.

$$\begin{aligned} a &= 87^\circ & b &= 112^\circ \\ c &= 47^\circ & d &= 65^\circ \\ e &= 92^\circ & f &= 46^\circ \end{aligned}$$



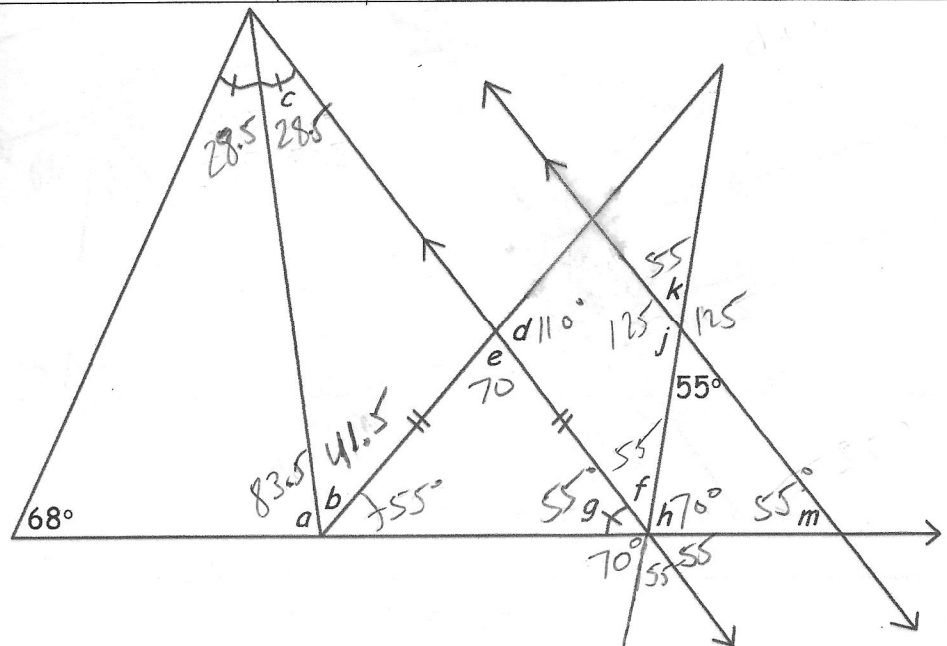
2.

$$\begin{aligned} k &= 30^\circ & m &= 80^\circ \\ n &= 118^\circ & p &= 32^\circ \\ r &= 32^\circ & s &= 52^\circ \\ t &= 148^\circ & v &= 80^\circ \end{aligned}$$



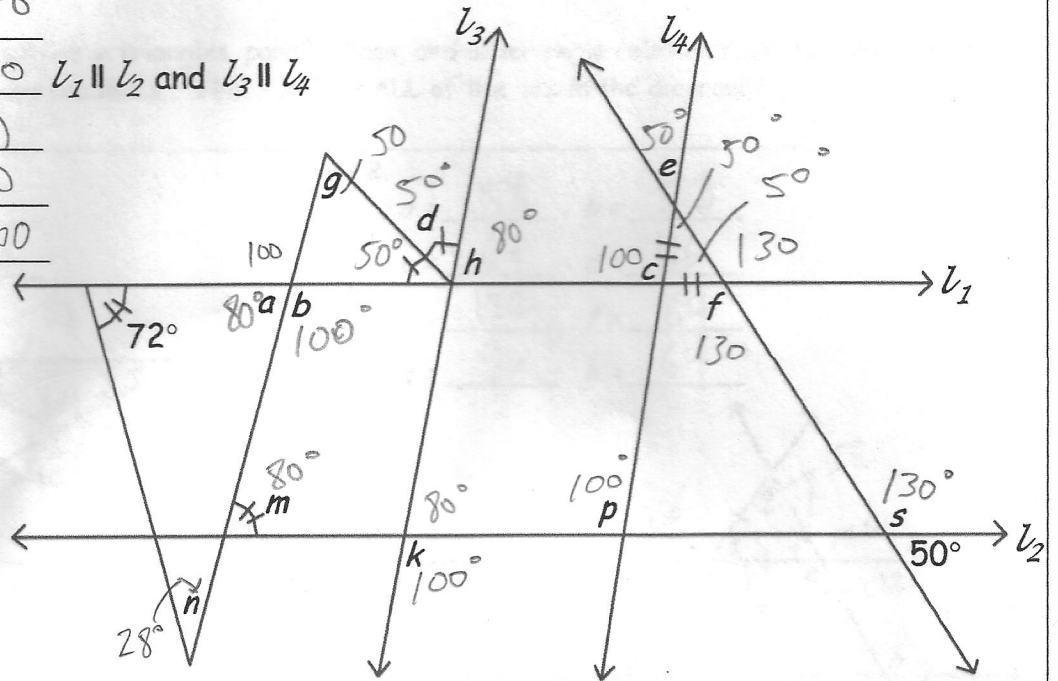
3.

$$\begin{aligned} a &= 77^\circ & b &= 48^\circ \\ c &= 35^\circ & d &= 110^\circ \\ e &= 70^\circ & f &= 55^\circ \\ g &= 55^\circ & h &= 70^\circ \\ j &= 125^\circ & k &= 55^\circ \\ m &= 55^\circ \end{aligned}$$



4.

$a = 80$   $b = 100$   
 $c = 100$   $d = 50$   
 $e = 50$   $f = 130$   $l_1 \parallel l_2$  and  $l_3 \parallel l_4$   
 $g = 50$   $h = 80$   
 $k = 100$   $m = 80$   
 $n = 28$   $p = 100$   
 $s = 130$



5.

$a = 110$   $b = 70$   
 $c = 117$   $d = 90$   
 $e = 104$   $f = 110$   
 $g = 110$   $h = 70$   
 $j = 75$   $k = 110$   
 $m = 66$   $n = 57$   
 $p = 70$   $q = 110$   
 $r = 66$   $s = 113$   
 $v = 98$

