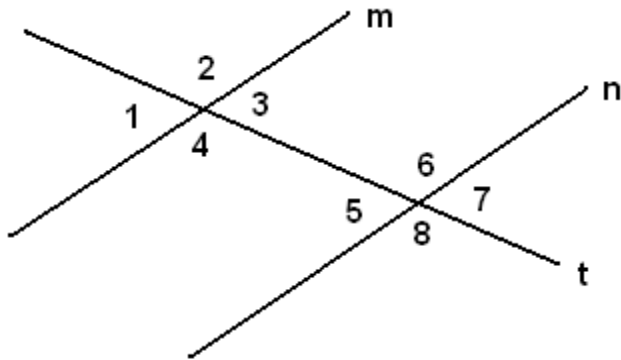


## Which Lines are Parallel?

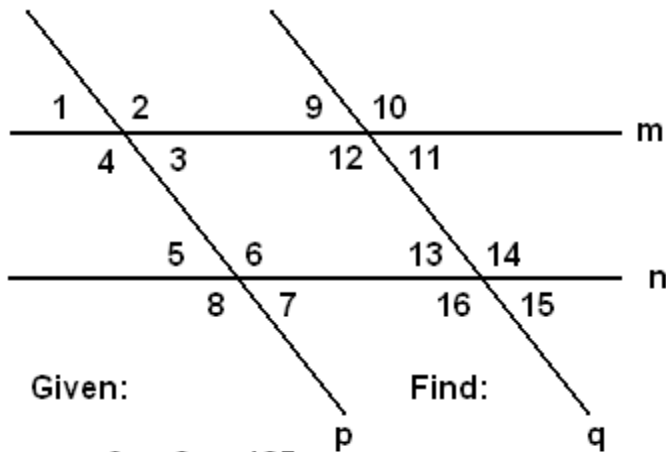
In each problem, determine if any pairs of lines are parallel. If so, state which pairs are parallel.  
**(NOT TO SCALE)**

[EX1]



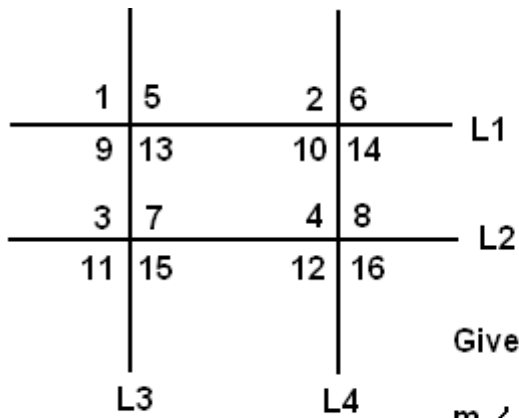
Given:  $m\angle 2 = 33 + 20x$       Find:  $x =$   
 $m\angle 3 = 5x + 52$   
 $m\angle 5 = 18x + 40.6$       Which lines (if any) are parallel?

[EX2]



Given:  $m\angle 6 = 8x + 135$       Find:  $x =$   
 $m\angle 7 = 70 - 3x$        $y =$   
 $m\angle 8 = 9y + 59$   
 $m\angle 9 = -8x + 48$       Which lines are parallel  
 $m\angle 14 = 17y + 29$       (if any)?

[EX3]



Given:

$$\begin{aligned}m \angle 7 &= 35x + 39 \\m \angle 8 &= 45x + 19 \\m \angle 11 &= 99 - 20y \\m \angle 6 &= 69 - 80y \\m \angle 14 &= 10y + 76 \\m \angle 5 &= 2y + 110\end{aligned}$$

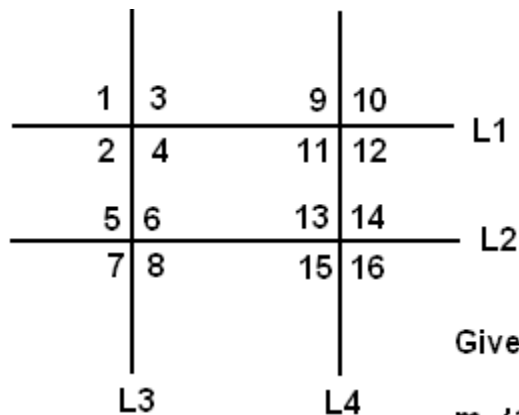
Find:

$$x =$$

$$y =$$

Which lines are parallel?  
(if any)

[EX4]



Given:

$$\begin{aligned}m \angle 13 &= 53 + 18x \\m \angle 6 &= 41x + 8 \\m \angle 16 &= 65 + 12x \\m \angle 5 &= 74 + 8y \\m \angle 10 &= 45x + 1 \\m \angle 3 &= 20y + 50\end{aligned}$$

Find:

$$x =$$

$$y =$$

Which lines are parallel?  
(if any)