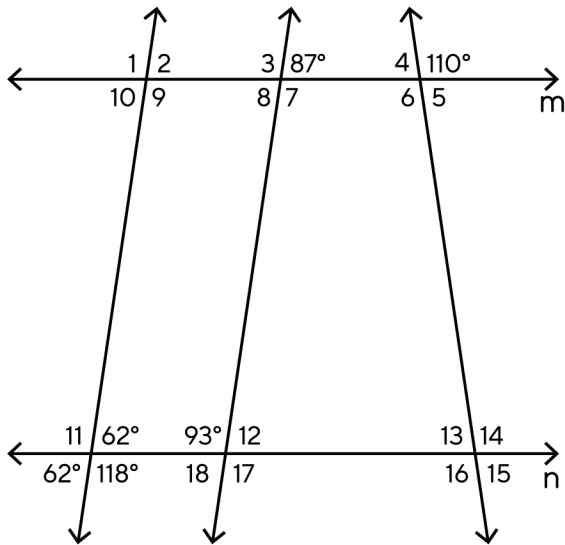


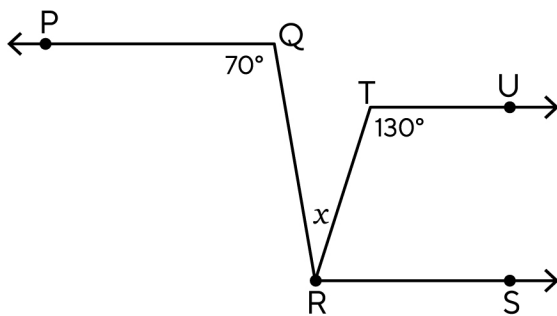
Parallel Lines in Geometry

1. Find the value of the following angles when line m is parallel to line n .



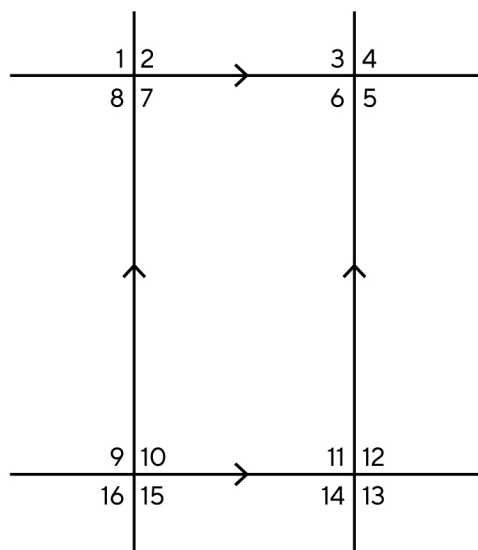
- | | | |
|-------|-------|-------|
| m∠1 | m∠2 | m∠3 |
| | | |
| m∠4 | m∠5 | m∠6 |
| | | |
| m∠7 | m∠8 | m∠9 |
| | | |
| m∠10 | m∠11 | m∠12 |
| | | |
| m∠13 | m∠14 | m∠15 |
| | | |
| m∠16 | m∠17 | m∠18 |
| | | |

2. Find the unknown angle x when $PQ \parallel RS \parallel TU$, $\angle PQR = 70^\circ$ and $\angle RTU = 130^\circ$.



$x = \angle QRT =$

3. Write the relation between each pair of the given angles.

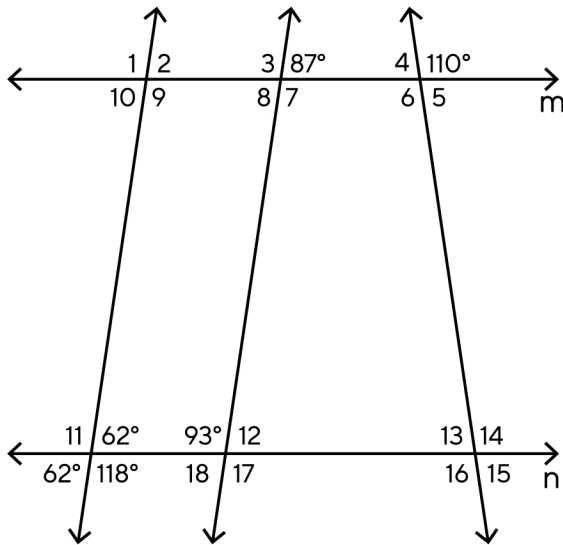


- | | |
|-----------------------------------|-------|
| a $\angle 2$ and $\angle 10$ are | |
| b $\angle 5$ and $\angle 13$ are | |
| c $\angle 11$ and $\angle 15$ are | |
| d $\angle 7$ and $\angle 9$ are | |
| e $\angle 3$ and $\angle 14$ are | |
| f $\angle 12$ and $\angle 9$ are | |
| g $\angle 10$ and $\angle 14$ are | |
| h $\angle 3$ and $\angle 13$ are | |

Parallel Lines in Geometry

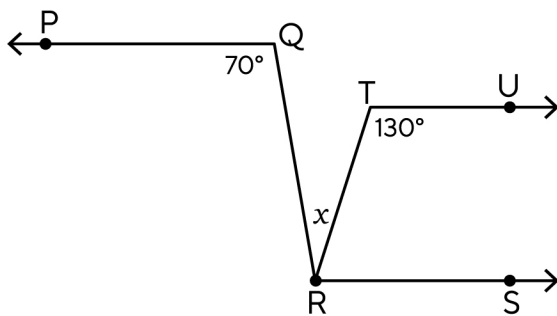
Answers

1. Find the value of the following angles when line m is parallel to line n .



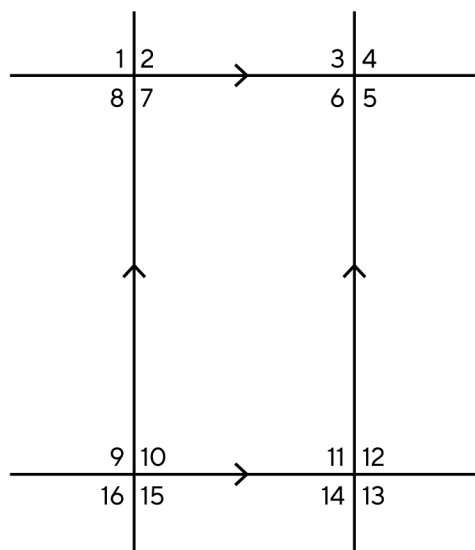
$m\angle 1$	118°	$m\angle 2$	62°	$m\angle 3$	93°
$m\angle 4$	70°	$m\angle 5$	70°	$m\angle 6$	110°
$m\angle 7$	93°	$m\angle 8$	87°	$m\angle 9$	118°
$m\angle 10$	62°	$m\angle 11$	118°	$m\angle 12$	87°
$m\angle 13$	70°	$m\angle 14$	110°	$m\angle 15$	70°
$m\angle 16$	110°	$m\angle 17$	93°	$m\angle 18$	87°

2. Find the unknown angle x when $PQ \parallel RS \parallel TU$, $\angle PQR = 70^\circ$ and $\angle RTU = 130^\circ$.



$$x = \angle QRT = 20^\circ$$

3. Write the relation between each pair of the given angles.



- | | | |
|---|---------------------------------|---------------------------|
| a | $\angle 2$ and $\angle 10$ are | corresponding angles |
| b | $\angle 5$ and $\angle 13$ are | corresponding angles |
| c | $\angle 11$ and $\angle 15$ are | alternate interior angles |
| d | $\angle 7$ and $\angle 9$ are | alternate interior angles |
| e | $\angle 3$ and $\angle 14$ are | co-exterior angles |
| f | $\angle 12$ and $\angle 9$ are | co-exterior angles |
| g | $\angle 10$ and $\angle 14$ are | alternate interior angles |
| h | $\angle 3$ and $\angle 13$ are | alternate exterior angles |