

Math 2

QUIZ
TOMORROW

Created with Doceri

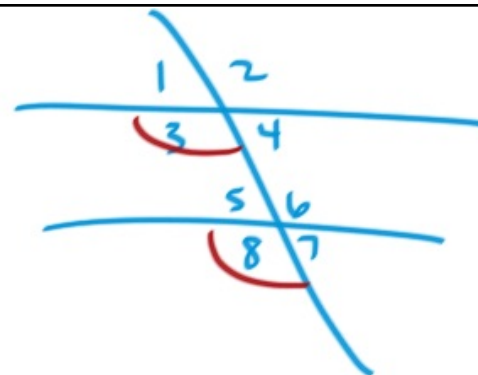


1. Given: $t \parallel h$
 Prove: $\angle 3 \cong \angle 6$

Statement	Reason
1. $t \parallel h$	Given
2. $\angle 3 \cong \angle 8$	Corresponding \angle s post. \cong
3. $\angle 8 \cong \angle 6$	vertical \angle 's \cong
4. $\angle 3 \cong \angle 6$	transitive \star

or
 substitute ($\angle 6$ for $\angle 8$)

2. Given: $t \parallel h$
 Prove: $\angle 2 \cong \angle 8$



3. Given: $t \parallel h$
 Prove: $\angle 3$ and $\angle 5$ are supplementary

Statement	Reason
1. $t \parallel h$	given
2. $\angle 3 \cong \angle 8$	Corresponding \angle s \cong /post.
3. $m\angle 3 = m\angle 8$	$\cong \angle$ s are equal
4. $\angle 8$ and $\angle 5$ are supp.	Definition of supp
5. $m\angle 8 + m\angle 5 = 180^\circ$	linear pair Postulate
6. $m\angle 3 + m\angle 5 = 180^\circ$	transitive Prop.
7. $\angle 3$ and $\angle 5$ are supp.	Definition of Supp.

4. Given: $t \parallel h$
 Prove: $\angle 2$ and $\angle 7$ are supplementary

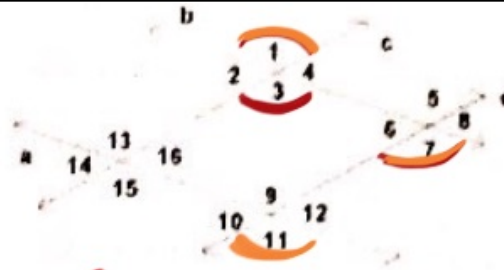
Created with Doceri



1. Given: $a \parallel b, c \parallel d$

Prove: $\angle 1 \cong \angle 11$

1. $a \parallel b$
2. $c \parallel d$
3. $\angle 1 \cong \angle 3$
4. $\angle 3 \cong \angle 7$
5. $\angle 1 \cong \angle 7$
6. $\angle 7 \cong \angle 11$
7. $\angle 1 \cong \angle 11$



Given

Given

Vertical \angle 's \cong
 Corresponding \angle 's \cong
 Transitive property

If 2 \parallel lines are cut by a transversal, then corresponding angles are \cong .

transitive property

2. Given: $a \parallel b, c \parallel d$

Prove: $\angle 16 \cong \angle 8$

1. $a \parallel b$
2. $c \parallel d$
3. $\angle 16 \cong \angle 12$
4. $\angle 12 \cong \angle 8$
5. $\angle 16 \cong \angle 8$



Given

Given

Corresponding \angle 's \cong
 Corresponding \angle 's \cong
 Transitive Prop

Created with Doceri



If lines n and k intersect at the point shown, then $m\angle 1 = m\angle 3$.



Reason Choices:

- ~~Linear Pair Postulate~~
- ~~Transitive Property (both equal 180)~~
- ~~Given~~
- Subtraction Property
- ~~Linear Pair Postulate~~

Statements	Reasons
1. lines n and k intersect at the point shown,	1. Given
2. Since lines n and k intersect, $\angle 1$ and $\angle 2$ are a linear pair So, $m\angle 1 + m\angle 2 = 180^\circ$.	2. Linear Pair Postulate
3. Since lines n and k intersect, $\angle 2$ and $\angle 3$ are a linear pair. So, $m\angle 2 + m\angle 3 = 180^\circ$.	3. linear Pair Post.
4. If $m\angle 1 + m\angle 2 = 180^\circ$ and $m\angle 2 + m\angle 3 = 180^\circ$, then $m\angle 1 + m\angle 2 = m\angle 2 + m\angle 3$.	4. transitive Prop
5. If $m\angle 1 + m\angle 2 = m\angle 2 + m\angle 3$, then $m\angle 1 = m\angle 3$.	5. subtraction

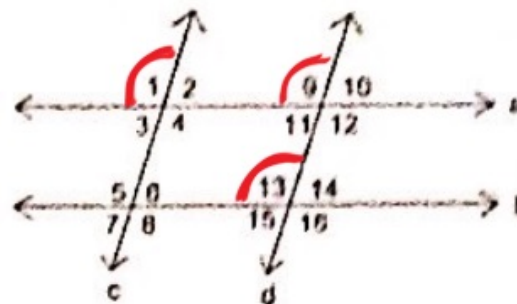
Created with Doceri



Fill in the reasons for each statement in the proof below.

Given: $a \parallel b$; $c \parallel d$

Prove: $\angle 1 \cong \angle 13$



Statements	Reasons
1. $a \parallel b$; $c \parallel d$	1. Given
2. $\angle 1 = \angle 9$	2. Corresponding \angle s Post (\cong)
3. $\angle 9 \cong \angle 13$	3. Corresponding Angles Assumption.
4. $\angle 1 = \angle 13$	transitive Prop.



Created with Doceri

#1. $m\angle C = 3x - 10$
 $m\angle F = x + 70$
Alt inter. \cong

$$\begin{array}{r} 3x - 10 = x + 70 \\ +10 \qquad \qquad +10 \\ \hline 3x = x + 80 \\ -x \quad -x \\ \hline 2x = 80 \\ \frac{2x}{2} = \frac{80}{2} \\ \boxed{x = 40} \end{array}$$

$w \parallel y$

Created with Doceri

