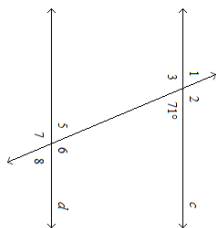
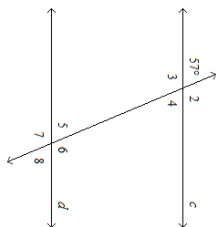


In the diagram, $c \parallel d$. Identify three numbered angles that have a measure of 71° .



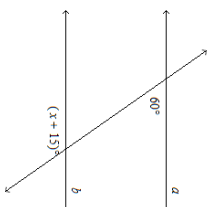
- a. $\angle 5$, $\angle 8$, and $\angle 2$
b. $\angle 1$, $\angle 5$, and $\angle 8$
- c. $\angle 1$, $\angle 8$, and $\angle 3$
d. $\angle 1$, $\angle 2$, and $\angle 3$

In the diagram, $c \parallel d$. Identify three numbered angles that have a measure of 57° .



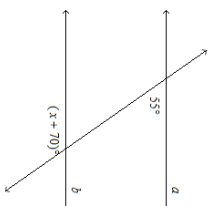
- a. $\angle 4$, $\angle 8$, and $\angle 6$
b. $\angle 4$, $\angle 2$, and $\angle 6$
- c. $\angle 4$, $\angle 5$, and $\angle 8$
d. $\angle 5$, $\angle 8$, and $\angle 2$

In the diagram, $a \parallel b$. Find the value of x .



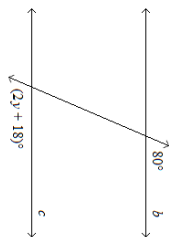
- a. 45
b. 135
- c. 105
d. 75

In the diagram, $a \parallel b$. Find the value of x .



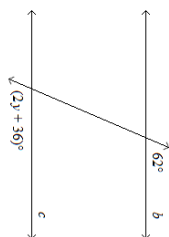
- a. 55
b. -15
- c. 195
d. 125

In the diagram, $b \parallel c$. Find the value of y .



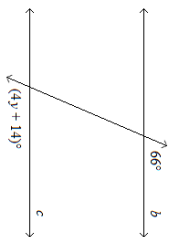
- a. 31
b. 59
c. 41
d. 49

In the diagram, $b \parallel c$. Find the value of y .



- a. 13
b. 49
c. 77
d. 41

In the diagram, $b \parallel c$. Find the value of y .



- a. 32
b. 25
c. 13
d. 20

Which is a correct two-column proof?

Given: $a \parallel b$

Prove: $\angle 4$ and $\angle 6$ are supplementary.



Statements	Reasons
1. $a \parallel b$	1. Given
2. $\angle 4 \cong \angle 6$	2. Vertical Angles
3. $\angle 4$ and $\angle 6$ are supplementary	3. Linear Pair Angles
4. $\angle 4 \cong \angle 6$	4. Vertical Angles
5. $\angle 4$ and $\angle 6$ are supplementary	5. Substitution

b.

Statements	Reasons
1. $a \parallel b$	1. Given
2. $\angle 4 \cong \angle 6$	2. Vertical Angles
3. $\angle 4$ and $\angle 6$ are supplementary	3. Alternate Interior Angles
4. $\angle 4 \cong \angle 6$	4. Vertical Angles
5. $\angle 4$ and $\angle 6$ are supplementary	5. Transitive Property

c.

Statements	Reasons
1. $a \parallel b$	1. Given
2. $\angle 4 \cong \angle 6$	2. Corresponding Angles
3. $\angle 4$ and $\angle 6$ are supplementary	3. Same-Side Interior Angles
4. $\angle 4 \cong \angle 6$	4. Vertical Angles
5. $\angle 4$ and $\angle 6$ are supplementary	5. Substitution

d. none of these

Which is correct: true-or-false proof?
Given: $\angle 1 \neq \angle 2$
Prove: ℓ and ℓ_2 are supplementary



- a.

Statements	Reasons
1. $\angle 1 \neq \angle 2$	1. Given
2. $\angle 3 \neq \angle 4$	2. Vertical Angles
3. $\angle 3$ and $\angle 4$ are supplementary	3. Adjacent Linear Angles
4. $\angle 1$ and $\angle 3$ are supplementary	4. Vertical Angles
5. $\angle 1$ and $\angle 4$ are supplementary	5. Substitution
- b.

Statements	Reasons
1. $\angle 1 \neq \angle 2$	1. Given
2. $\angle 3 \neq \angle 4$	2. Vertical Angles
3. $\angle 3$ and $\angle 4$ are supplementary	3. Adjacent Linear Angles
4. $\angle 1$ and $\angle 3$ are supplementary	4. Vertical Angles
5. $\angle 1$ and $\angle 4$ are supplementary	5. Substitution
- c.

Statements	Reasons
1. $\angle 1 \neq \angle 2$	1. Given
2. $\angle 3 \neq \angle 4$	2. Corresponding Angles
3. $\angle 3$ and $\angle 4$ are supplementary	3. Substitution
4. $\angle 1$ and $\angle 3$ are supplementary	4. Vertical Angles
5. $\angle 1$ and $\angle 4$ are supplementary	5. Substitution
- d. none of these

Write an equation of the line passing through the point $(7, 2)$ that is parallel to the line $y = 5x + 9$ in slope-intercept form.

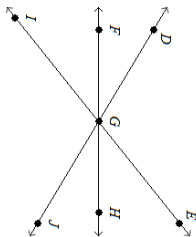
Write an equation of the line passing through the point $(7, 2)$ that is parallel to the line $y = 5x + 9$ in slope-intercept form.

Write an equation of the line passing through the point $(-4, -9)$ that is parallel to the line $y = 6x - 7$ in slope-intercept form.

Are the lines $y = -x + 5$ and $5x - 5y = 25$ perpendicular? Explain.

Are the lines $y = -x + 8$ and $2x + 2y = 10$ perpendicular? Explain.

Name an angle adjacent to $\angle EGH$.



Name an angle adjacent to $\angle FGI$.

