



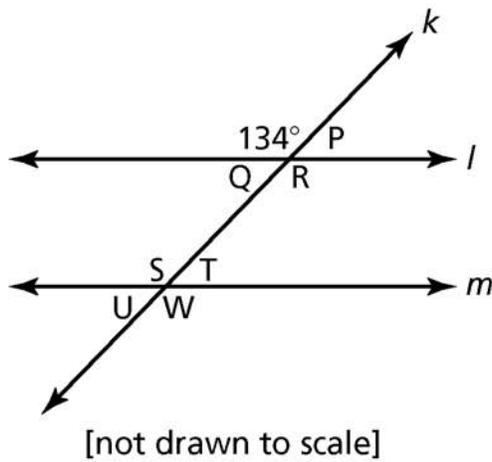
New York State Testing Program

Mathematics Test

Grade **8**

2009 Scoring Guide Part 2

34 In the diagram below, line l and line m are parallel, and line k is a transversal.



What is the measure of $\angle U$?

Answer _____ degrees

On the lines below, explain how you determined your answer.

QUESTION 34

STRAND 3: GEOMETRY

Complete and Correct Response:

- 46 (degrees)

AND

- Alternate exterior angles are congruent, so $\angle w = 134$ degrees. Since $\angle u$ and $\angle w$ are supplementary angles, the sum of their measures is 180 degrees. So, $\angle u = 46$ degrees.

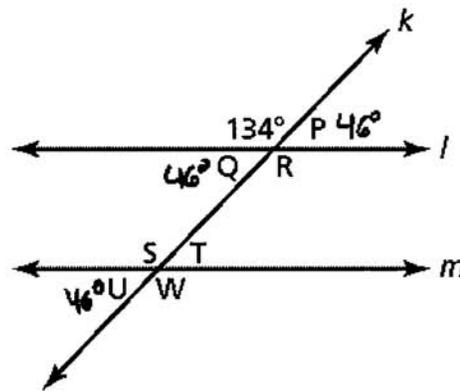
OR other valid response

Score Points:

Apply 2-point holistic rubric.

34

In the diagram below, line l and line m are parallel, and line k is a transversal.



$$\begin{array}{r} 180^\circ \\ - 134 \\ \hline 46 \end{array}$$

[not drawn to scale]

What is the measure of $\angle U$?

Answer 46° degrees

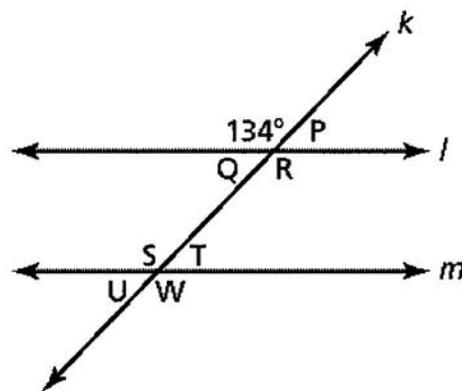
On the lines below, explain how you determined your answer.

I determined my answer by subtracting
134° from 180° because I knew that
the sum of $\angle P$ and 134° had to equal 180°
since they are supplementary angles. Then
I knew that $\angle P$ and $\angle Q$ were equal ^{since they were vertical angles} and
I also knew that $\angle Q$ and $\angle U$ are also
equivalent, since they are corresponding angles.

This response is complete and correct.

Score Point 2

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

What is the measure of $\angle U$?

Answer 46 degrees

$$\begin{array}{r} 180 \\ -134 \\ \hline 46 \end{array}$$

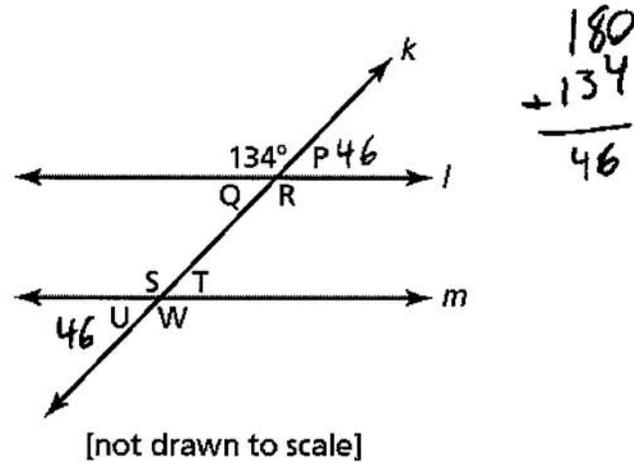
On the lines below, explain how you determined your answer.

I determined my answer because the angle 134° and $\angle W$ are alt. exterior angles. The one next to that is linear. So angle U and W added up to 180° .

This response is complete and correct. The correct measure for angle U is provided, and the explanation is sufficient to demonstrate a thorough understanding of supplementary angles.

Score Point 2

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



What is the measure of $\angle U$?

Answer 46° degrees

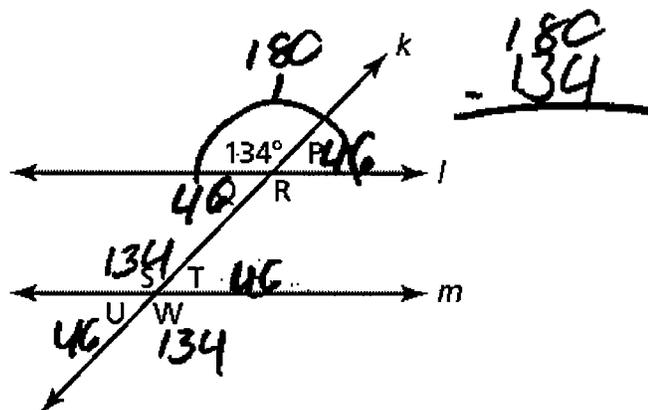
On the lines below, explain how you determined your answer.

134° is complementary with $\angle P$ so angle P is
46° and $\angle U$ is a congruent exterior so it is the
same as $\angle P$.

This response is only partially correct. The correct measure for angle U is provided; however, the explanation contains an incorrect mathematical statement.

Score Point 1

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

What is the measure of $\angle U$?

Answer 46 degrees

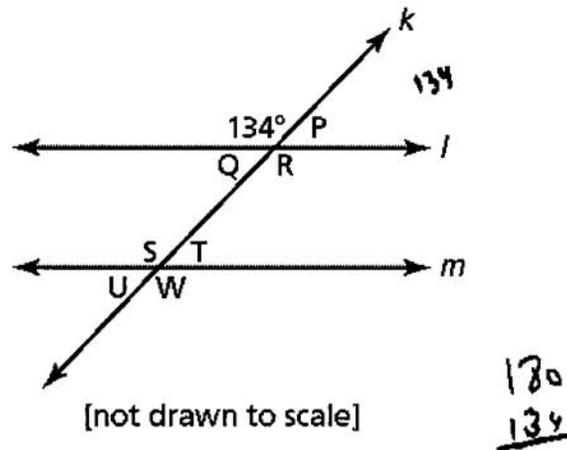
On the lines below, explain how you determined your answer.

Because you have to find the
straight 180 so you subtract

This response is only partially correct. The correct measure for angle U is provided; however, the explanation needs to refer to the subtraction of 134 from 180 for a thorough understanding of the task.

Score Point 1

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



What is the measure of $\angle U$?

Answer 40° degrees

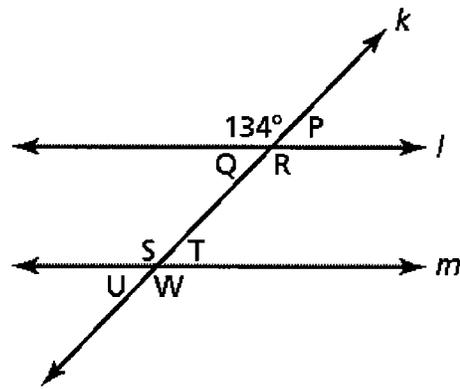
On the lines below, explain how you determined your answer.

I solved it for $180 - 134$

This response is only partially correct. An incorrect measure for angle U is provided; however, a mathematically sound procedure is described in the explanation.

Score Point 1

34 In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

What is the measure of $\angle U$?

Answer 180 degrees

On the lines below, explain how you determined your answer.

Because if $\angle P$ and $\angle U$ are
the same measurements so
 $\angle P$'s 180°

This response is incorrect. The understanding that angles P and U are equal is not sufficient to demonstrate even a limited understanding of the task.

Score Point 0



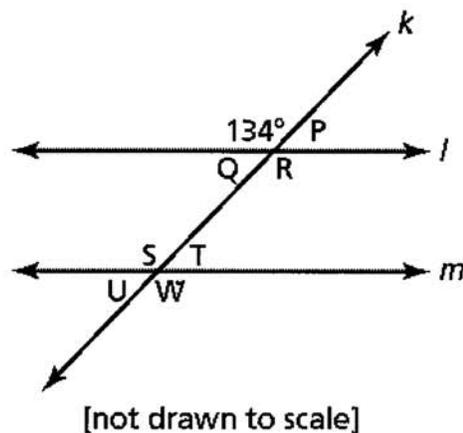
New York State Testing Program

Mathematics Test

Grade **8**

2009 Practice Test

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



$$\begin{array}{r} 180 \\ -134 \\ \hline 54 \end{array}$$

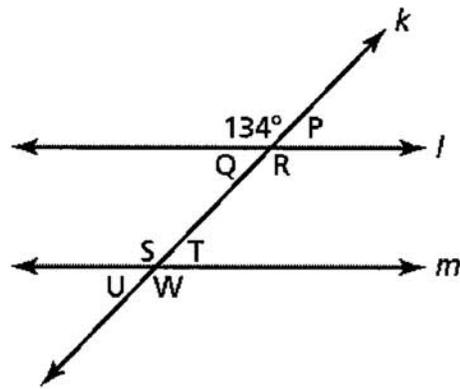
What is the measure of $\angle U$?

Answer 54 degrees

On the lines below, explain how you determined your answer.

~~I determined the measure of $\angle U$~~
~~because it is supplementary and you~~
~~have to subtract 180° by 134° (angle of~~
~~one side and it equals 54°~~

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

What is the measure of $\angle U$?

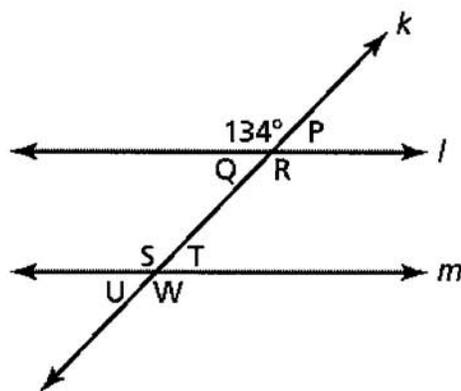
Answer 131° degrees

On the lines below, explain how you determined your answer.

well I got this by using my
protractor

34

In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

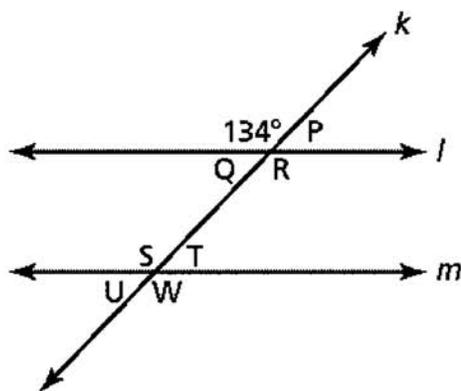
What is the measure of $\angle U$?

Answer 46 degrees

On the lines below, explain how you determined your answer.

I determined my answer by finding the relationship between $\angle 134^\circ$ and $\angle U$. I realized that $\angle 134^\circ$ and $\angle S$ were corresponding angles which means $\angle S$ is equal to 134° . Once I knew that, I subtracted 180° by 134° and got 46° which is the measurement of $\angle U$.

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



[not drawn to scale]

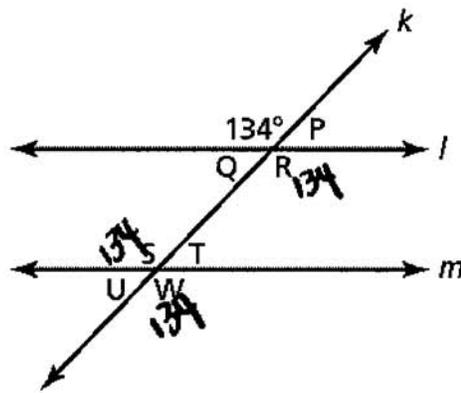
What is the measure of $\angle U$?

Answer 46° degrees

On the lines below, explain how you determined your answer.

\angle 's 134° , R , S , W are obtuse and have the same measure. \angle 's S , U equal 134° . $180 - 134^\circ$ gives you 46° which is $\angle U$. Angle U is also acute.

- 34 In the diagram below, line l and line m are parallel, and line k is a transversal.



$$\begin{array}{r} 180 \\ - 134 \\ \hline 46 \end{array}$$

[not drawn to scale]

What is the measure of $\angle U$?

Answer 46 degrees

On the lines below, explain how you determined your answer.

I determined my answer by subtracting 180 degrees from 134 degrees.

8th GRADE MATHEMATICS

Name: _____

PRACTICE SET ANSWER KEY

PS 1	(0-2)	1
PS 2	(0-2)	1
PS 3	(0-2)	0
PS 4	(0-2)	1
PS 5	(0-2)	2
PS 6	(0-2)	2
PS 7	(0-2)	0
PS 8	(0-2)	2
PS 9	(0-2)	1
PS 10	(0-2)	2
PS 11	(0-2)	2
PS 12	(0-2)	0
PS 13	(0-2)	1
PS 14	(0-2)	1
PS 15	(0-2)	2
PS 16	(0-2)	2
PS 17	(0-2)	1
PS 18	(0-2)	0
PS 19	(0-2)	2
PS 20	(0-2)	1
PS 21	(0-3)	2
PS 22	(0-3)	3
PS 23	(0-3)	0
PS 24	(0-3)	1
PS 25	(0-3)	2

PS 26	(0-3)	3
PS 27	(0-3)	1
PS 28	(0-3)	0
PS 29	(0-3)	1
PS 30	(0-3)	2
PS 31	(0-2)	1
PS 32	(0-2)	0
PS 33	(0-2)	2
PS 34	(0-2)	2
PS 35	(0-2)	1
PS 36	(0-2)	1
PS 37	(0-2)	2
PS 38	(0-2)	1
PS 39	(0-2)	1
PS 40	(0-2)	2
PS 41	(0-2)	1
PS 42	(0-2)	0
PS 43	(0-2)	2
PS 44	(0-2)	2
PS 45	(0-2)	1
PS 46	(0-2)	0
PS 47	(0-2)	2
PS 48	(0-2)	1
PS 49	(0-2)	2
PS 50	(0-2)	1

