

Your Work:

Corrected Work:

1. Refer to the diagram. Fill in the reason for the statement.

a. If $m\angle 3 = m\angle 6$, then $m \parallel n$

_____.

b. If $m\angle 2 = m\angle 6$, then $m \parallel n$

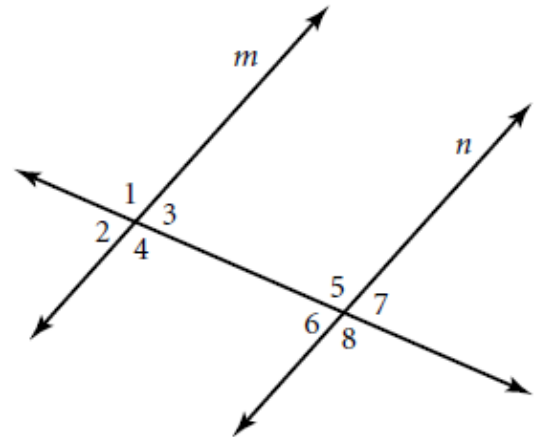
_____.

c. If $m\angle 2 = m\angle 7$, then $m \parallel n$

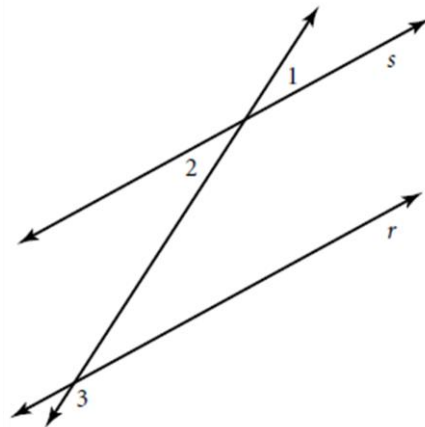
_____.

d. If $\angle 3$ and $\angle 5$ are supplementary, then $m \parallel n$

_____.



2. In the figure at right, $m\angle 1 = 3x + 14$, $m\angle 2 = 9x + 14$, and $m\angle 3 = 30x + 14$. Determine whether or not $r \parallel s$. Justify your answer.

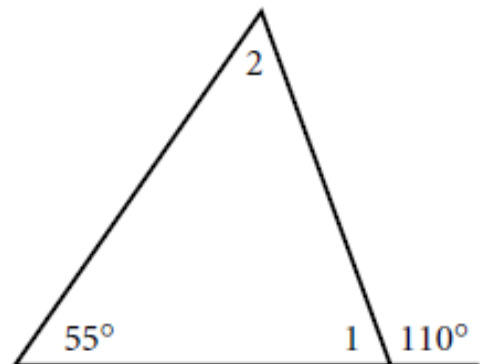


3. Use the figure to the right find:

$m\angle 1 =$ _____

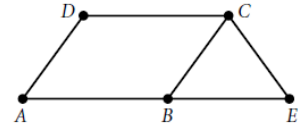
$m\angle 2 =$ _____

The angle which measures 110° is called an _____.



4. **Given:** $\overline{DA} \parallel \overline{BC}$; $\angle A \cong \angle E$

Prove: $\triangle CBE$ is isosceles with base \overline{BE}

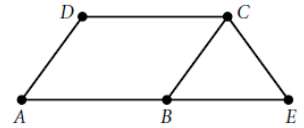


Statements

Reasons

5. **Given:** $\overline{DC} \parallel \overline{AE}$; $\angle A \cong \angle DCB$

Prove: $\overline{DA} \parallel \overline{BC}$



Statements

Reasons

6. Factor: $x^2 - 10x - 24$

7. Solve: $x^2 - 3x + 2 = 0$