Name_____ Date_____

Parallel Lines and Transversals

Fill in the blank

1) Transversal: A line that _____ two lines at _____ different points.

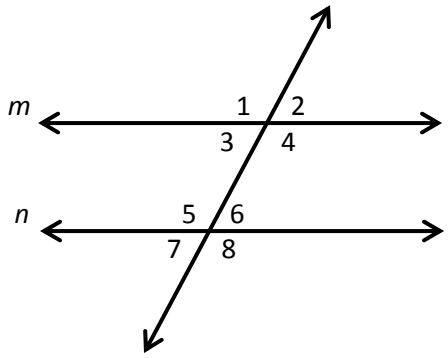
2) Parallel lines are lines that never _____.

3) ∠1 and ∠8 are _____.

4) ∠1 and ∠4 are _____.

5) ∠2 and ∠6 are _____.

6) ∠3 and ∠6 are _____



Determine the angle measure of each given angle (Justify your answers with: Vertical, Linear Pair, Corresponding, Alternating Interior, or Alternating Exterior Angles).

7) m∠1 =110°, m∠4=_____ Reason:_____

8) m∠2 =40°, m∠6=_____ Reason:_____

9) m∠7 =60°, m∠3=_____ Reason:_____

10) m∠8 =125°, m∠1=_____ Reason:_____

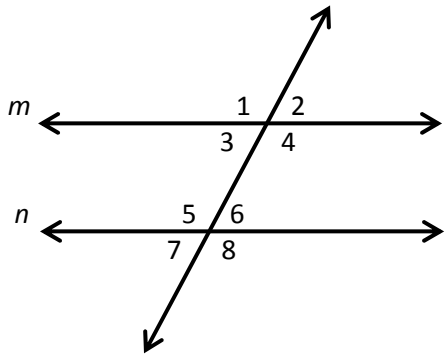
11) m∠6 =35°, m∠5=_____ Reason:_____

12) m∠4 =112°, m∠5=_____ Reason:_____

13) m∠1 =105°, m∠6=_____ Reason(s):_____

14) m∠7 =24°, m∠1=_____ Reason(s):_____

Challenge Problems Next Page



15) Find the missing angle using Corresponding angles as one of your reasons.

m∠7 =68°, m∠4=_____ Reason(s):_____

16) Find the missing angle using Alternating Interior Angles as one of your reasons.

m∠3 =75°, m∠8=_____ Reason(s):_____

17) Find the missing angle using <u>Alternating Exterior Angles</u> as one of your reasons.
(This may take more than 2 steps)

m∠3 =28°, m∠1=_____ Reason(s):_____

18) Find the missing angle using <u>Verical Angles</u> as one of your reasons.
(This may take more than 2 steps)

m∠7 =73°, m∠1=_____ Reason(s):_____