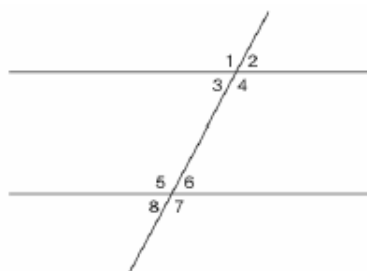
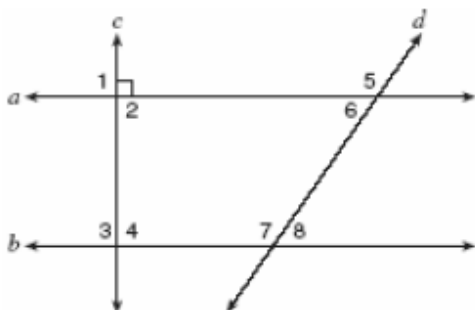


1. In the accompanying figure, what is one pair of alternate interior angles?



- [A] $\angle 1$ and $\angle 2$ [B] $\angle 4$ and $\angle 6$ [C] $\angle 6$ and $\angle 8$ [D] $\angle 4$ and $\angle 5$

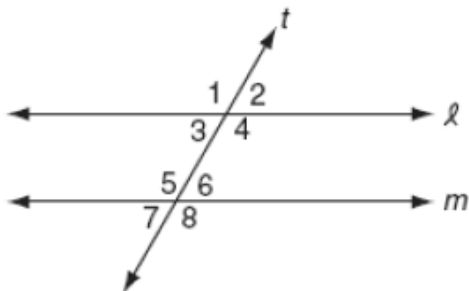
2. In the accompanying diagram, lines a and b are parallel, and lines c and d are transversals.



Which angle is congruent to angle 8?

- [A] 6 [B] 3 [C] 4 [D] 5

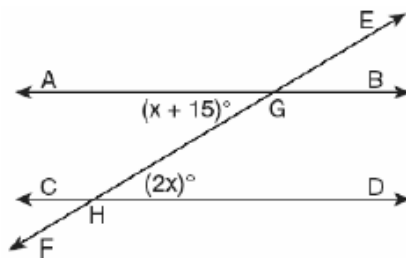
3. In the accompanying diagram, line ℓ is parallel to line m , and line t is a transversal.



Which must be a true statement?

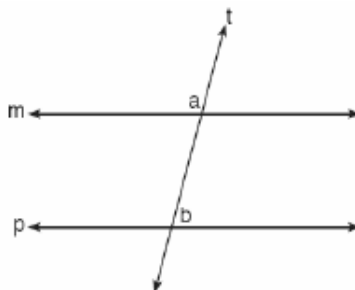
- [A] $m\angle 2 + m\angle 5 = 180$ [B] $m\angle 1 + m\angle 8 = 180$ [C] $m\angle 3 + m\angle 6 = 180$ [D] $m\angle 1 + m\angle 4 = 180$

4. In the accompanying diagram, parallel lines \overline{AB} and \overline{CD} are intersected by transversal \overline{EF} at points G and H , respectively, $m\angle AGH = x + 15$, and $m\angle GHD = 2x$.



Which equation can be used to find the value of x ?

- [A] $2x + x + 15 = 90$ [B] $2x = x + 15$ [C] $2x + x + 15 = 180$ [D] $2x(x + 15) = 0$
5. In the accompanying diagram, line m is parallel to line p , line t is a transversal, $m\angle a = 3x + 12$, and $m\angle b = 2x + 13$. Find the value of x .



6. In the accompanying diagram, $CD \parallel EF$, AB is a transversal, $m\angle DGH = 2x$, and $m\angle FHB = 5x - 51$. Find the measure, in degrees, of $\angle BHE$.

