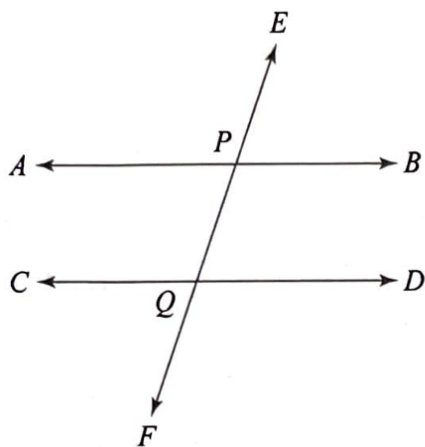


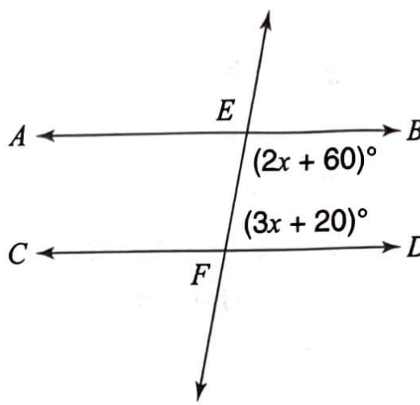
Geometry #11: Angles Formed by Parallel Lines

Do Now

2. In the accompanying diagram, parallel lines \overline{AB} and \overline{CD} are cut by transversal \overline{EF} at P and Q , respectively. Which statement must *always* be true?
- (1) $m\angle APE = m\angle CQF$
 - (2) $m\angle APE + m\angle CQF = 90$
 - (3) $m\angle APE < m\angle CQF$
 - (4) $m\angle APE + m\angle CQF = 180$



Exercise 2



Exercise 3

3. In the accompanying diagram, parallel lines \overline{AB} and \overline{CD} are cut by transversal \overline{EF} . If $m\angle BEF = 2x + 60$ and $m\angle EFD = 3x + 20$, what is $m\angle BEF$?
- (1) 100
 - (2) 20
 - (3) 140
 - (4) 40