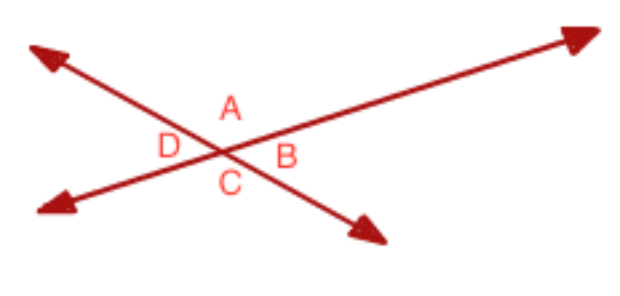
Lines and Angles

About These Problems

These questions often involve a pair of intersecting lines and involve you finding the angles between the intersection. The key thing about intersecting lines is that the angle on one side of a line adds up to 180 degrees and all the angles around an intersection add up to 360 degrees. Angles opposite each other in an intersection are called vertical angles.



Rules:

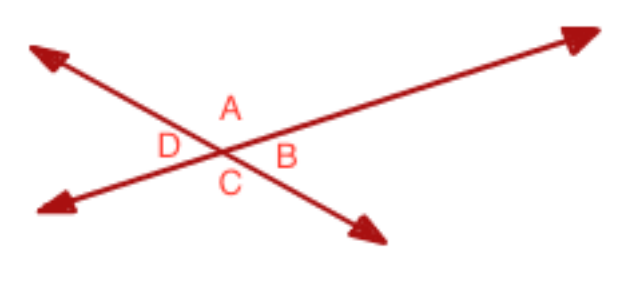
A = C and B = D (vertical angles)

A + D = A + B = 180 degrees

B + C = D + C = 180 degrees

A + B + C + D = 360 degrees

Question. Based upon the figure below if A = 140 degrees what is D + C/2?



1. 160 degrees
2. 150 degrees
3. 115 degrees
4. 120 degrees
5. 110 degrees

Answer. 5: You know that A + D = 180 so D = 40 degrees and C/2 is 140/2. 70 + 40 = 110 degrees.