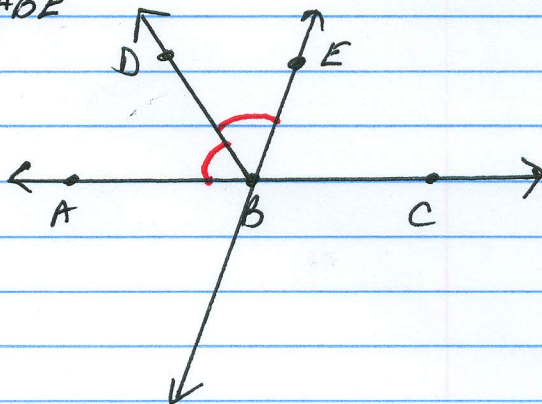


Draw Picture \vec{BA} \vec{BC} are opposite rays
 line \vec{EB} intersects \vec{AC} at B
 \vec{BD} bisects $\angle ABE$



ex1 $m\angle ABD = 8x - 15$
 $m\angle DBE = 3x + 10$

Know $m\angle ABD = m\angle DBE$
 $8x - 15 = 3x + 10$

$m\angle DBE / m\angle ABD = 25$

$5x = 25$

$x = 5$

ex2 $m\angle DBE = 6x + 4$
 $m\angle EBC = 9x + 10$
 $m\angle DBC = 17x + 2$

Know $m\angle DBE + m\angle EBC = m\angle DBC$

$6x + 4 + 9x + 10 = 17x + 2$

$15x + 14 = 17x + 2$

$12 = 2x$

$x = 6$

$m\angle DBE = 40$
 $m\angle EBC = 64$
 $m\angle DBC = 104$

ex3 $m\angle ABD = 3x + 4$
 $m\angle ABE = 8x - 6$

Know $2m\angle ABD = m\angle ABE$

$2(3x + 4) = 8x - 6$

$6x + 8 = 8x - 6$

$14 = 2x$

$7 = x$

$m\angle ABD = 25$
 $m\angle ABE = 50$