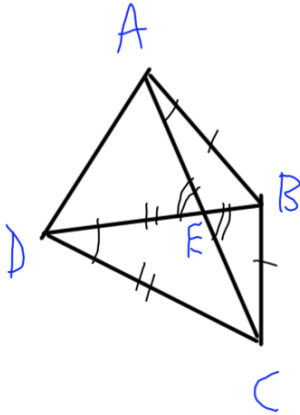


Sheet 161: Bisectors and Vertical Angles Practice

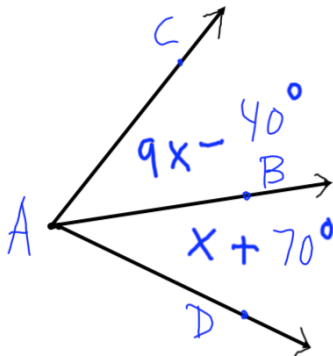
Name: _____

- Find the midpoint of a segment with endpoints (3, 4) and (-1, 1).
- Write the congruent angles and the congruent sides on the triangle shown using the letters A, B, and C, D, and E as usual. Just use the marks, not any theorems.



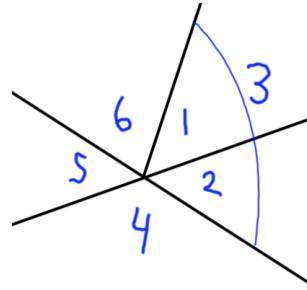
- Sketch this figure. ("Sketch" means ruler, protractor, and compass are not needed). \overline{BD} bisects $\angle ABC$. If $m\angle DBC = 32^\circ$, what is $m\angle ABD$?

- \overline{AB} bisects $\angle CAD$. Find x and all three angles.

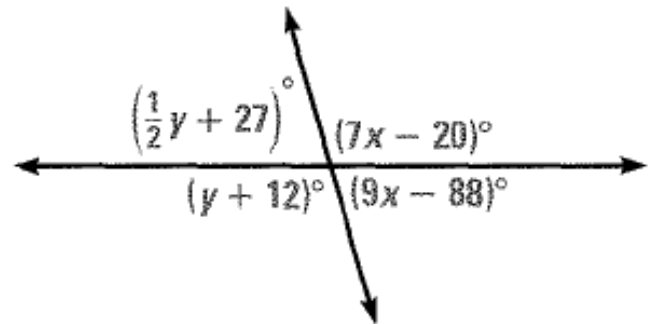


- Contemplate the figure below.
 - Which numbered angles form linear pairs?
 - Which numbered angles are vertical angles?
 - Which angles are definitively congruent?

- If $m\angle 5 = 35^\circ$ and $m\angle 3 = 100^\circ$, find the measures of as many of the other angles as possible (you cannot assume that angles that look like right angles are right angles)?



- Find the measure of an angle that is complementary to an angle with measure 40° .
- Find the measure of an angle that is supplementary to an angle with measure 80° .
- Find x , y and all angles.



- Draw a segment. Bisect it using only a compass and straightedge (no ruler markings). Leave the compass marks. Use the back of the page.
- Draw an obtuse angle. Bisect it using only a compass and straight edge (no protractor and no ruler markings). Leave the compass marks. Use the back of the page.