1.6 GEOMETRY ON THE PLANE 1 – ANGLES – EXERCISES & PROBLEMS[1]

1. Without a protractor, using the properties of lines and angles, find the missing angles. Explain your reasoning.

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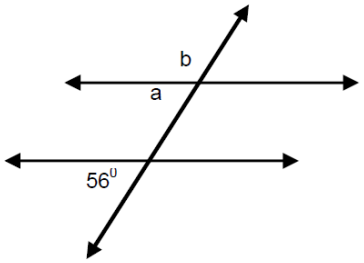

Explanation _____

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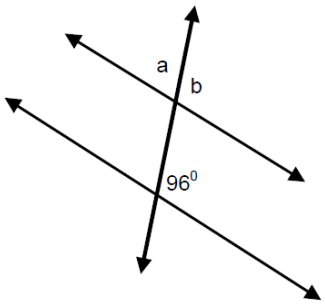

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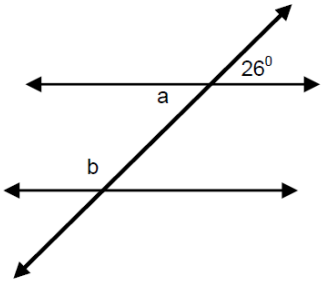

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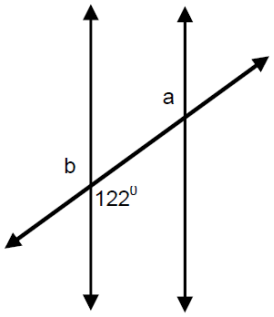

Explanation _____

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[1] based on source http://westernquebec.ca/

2. Find the missing angles. Explain your reasoning.

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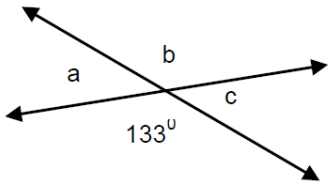

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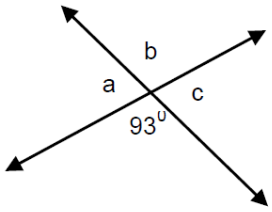

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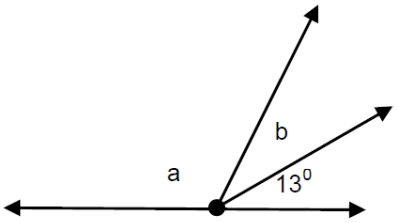

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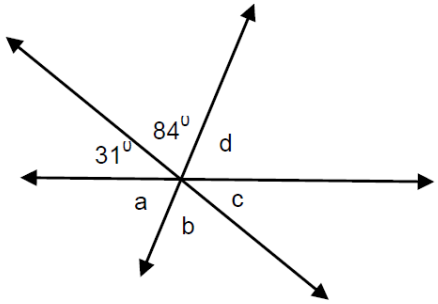

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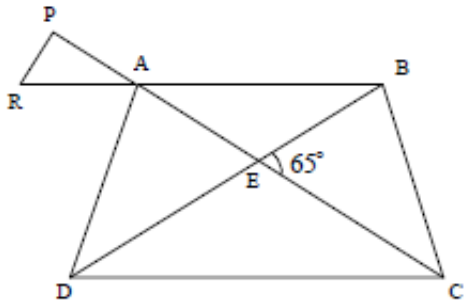
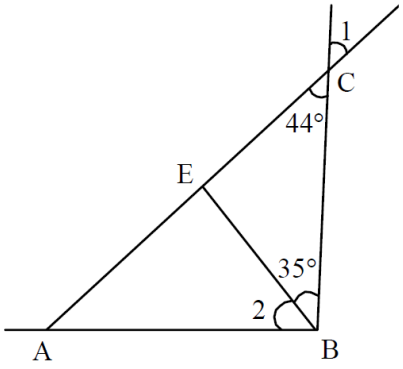
3. In the figure below, $AB \parallel CD$. Find the measure of angle $\measuredangle RAP$. Give reason (in words) for each step or calculation. $\measuredangle PAC$ and $\measuredangle RAP$ are straight angles.

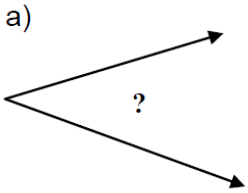


4. Rays BA and BC are perpendicular, angle BCE measures 44 degrees and angle EBC measures 35 degrees.
a) Find the measure of 1. Give explanation.
b) Find the measure of 2. Give explanation.

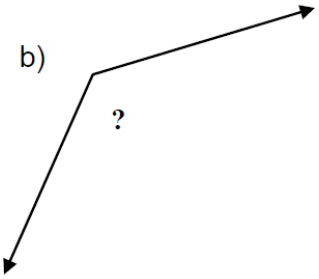


5. What is the measure of the following angles? What type of angles are they? How do you know?

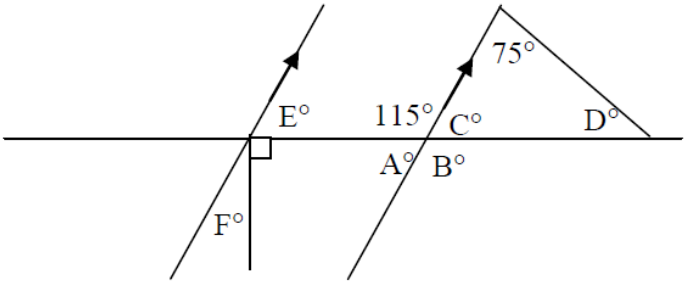
a)



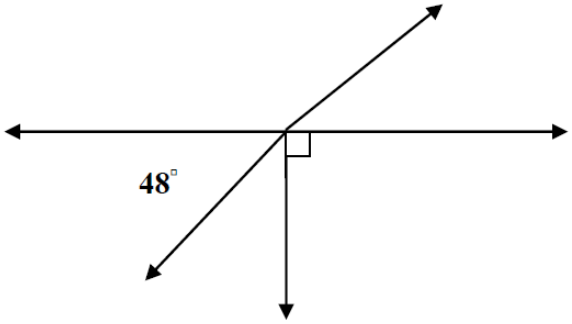
b)



6. Solve the following angles.



7. What are all missing angles?



STUDENTS NOTES.