10 step process to solve problem

a. Problem statement

b. Draw the diagram of the problem

1. Questions for clarification:
   - Why do you say that?
   - How does this relate to our discussion?
   - "Are you going to include static equilibrium equations to solve for forces?"

2. Questions that probe assumptions:
   - What could we assume instead?
   - How can you verify or disapprove that assumption?
   - "Why are you neglecting moment equation?"

3. Questions that probe reasons and evidence:
   - What would be an example?
   - What is....analogous to?
   - What do you think causes to happen...? Why:?
   - "Do you think that bending is responsible for stresses?"

4. Questions about Viewpoints and Perspectives:
   - What would be an alternative?
   - What is another way to look at it?
   - Would you explain why it is necessary or beneficial, and who benefits?
   - Why is the best?
   - What are the strengths and weaknesses of...?
   - How are...and ...similar?
   - What is a counterargument for...?

5. Questions that probe implications and consequences:
   - What generalizations can you make?
   - What are the consequences of that assumption?
   - What are you implying?
   - How does...affect...?
   - How does...tie in with what we learned before?
   - "How would our results be affected if neglected bending?"

6. Questions about the question:
   - What was the point of this question?
   - Why do you think I asked this question?
   - What does...mean?
   - How does...apply to everyday life?

c. Read the problem carefully and identify the known and unknown values.

d. Identify the question
e. State the assumptions

f. Identify the equations, units and/or relevant information to solve the problem

g. Draw the Free Body Diagrams

h. Setup equations and perform calculations

i. Include proper units and box your answers

j. Finally at the end write your own reflections describing the concepts covered in the problem and issues in solving the problem