## Algebra and Geometry Review 8

| 1. Sarah and Maggie were traveling from Chicago to Washington DC, which is approximately 700 miles. Sarah started first and traveled at 50 mph . Maggie left 2 hours later and traveled at 65 mph . Did Maggie overtake Sarah before they got to Washington DC and if so, how far away from Washington were they? (Show all of your work on the back.) | 2. True or False. <br> A) Two angles that are acute can also be complementary. <br> B) Two angles that are obtuse can also be supplementary. |
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| 3. Solve the system of equations. $\begin{gathered} 5 x+2 y=1 \\ y=x+4 \end{gathered}$ | 4. What does CPCTC stand for? |
| The Venn Diagram shown below shows the number of students that are in soccer, in band, and in both. Answer the questions based on the diagram. <br> 5. How many total students are represented in the diagram? | 6. The given shape is a parallelogram. What is the value of $x+y$ ? |
| 7. How many students are in band only? | 8. How many diagonals can be drawn in a pentagon? |
| 9. Solve for x . $\sqrt{10 x+3}=5$ | 10.Find the area of a regular hexagon that has an apothem of $3 \sqrt{3}$. |

