## Grade 7

## Extra Challenges - Set III

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1. Carmelo Anthony, a basketball player for the Nuggets was shooting $42 \%$ after his first 50 shots. If he doesn't miss another shot, how many baskets must he make so that he has a $50 \%$ shooting percentage?

2. A rectangular sheet of cardboard has 4 small equal squares removed from its corners. It is then folded to make a 5 cm by 4 cm box with volume $60 \mathrm{~cm}^{3}$. What was the original area of the cardboard?
3. If $a, b, c, d$, and $e$ are positive integers such that $a+b+c+d+e=20$ and $a+b+c=14$ and $c+d+e=16$, what is the value of $c$ ?
4. What is the measure of the obtuse angle formed by the hour and minute hands of a clock at 10:10?

5. Inside square $A B C D$ is equilateral triangle $E C D$. Determine the measure of angle $A E B$.

