Name:
Date: $\qquad$
Teacher: $\qquad$ School: $\qquad$

## Moscrop Math Problem Set \#2 (May 2010)

1. A regular polygon has 6 times as many diagonals as sides. How many sides does this polygon have?
2. A jar contains quarters (worth $\$ 0.25$ each), nickels (worth $\$ 0.05$ each) and pennies (worth $\$ 0.01$ each). The value of the quarters is $\$ 10.00$. The value of the nickels is $\$ 10.00$. The value of the pennies is $\$ 10.00$. If Judith randomly chooses one coin from the jar, what is the probability that it is a quarter?
3. John noticed that the angle formed by the minute hand and hour hand on a standard 12-hour clock was $110^{\circ}$ when he left home after 6 pm ; it was also $110^{\circ}$ when he returned after 6 pm , but before 7 pm that same night. If he left home for more than five minutes, for how many minutes was he away?
4. Niki usually leaves her cell phone on. If her cell phone is on when she is not actually using it, the battery will last for 24 hours. If she is using it constantly, the battery will last for only 3 hours. Since the last recharge, her phone has being on 9 hours, and during that time she has used it for 60 minutes. If she doesn't talk any more but leaves the phone on, how many more hours will the battery last?
