**State your assumptions and show all of your reasoning and all computations. All work must be done on this sheet.**

1. **(5 pts) How can I change the resolution of an ADC? (select all that apply)**
   1. Change the input port
   2. Change the full scale voltage (reference)
   3. Change the clock frequency
   4. Change number of bits (if more bits are available).
   5. Resolution can’t be changed
2. **(5 pts) How many ADC cores are in the MSP432? (select all that apply)**
   1. 1
   2. 2
   3. 4
   4. 16
   5. 32
3. **(10 pts)** For **a given 12 BIT ADC, Vref = 3.0V.**

What is the step size (resolution) for each bit?

**Answer the following based on the CCS command: (6 pts each)**

***EUSCI\_A0->CTLW0 = 0x59C5;***

1. **What is the data length (in bits?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **What is the clock source? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **Will the UART be setup to transmit an address or data? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **How many Stop bits? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **Even or Odd Parity?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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