

1. Polling is when a processor checks for change in the status. An interrupt is when an external event sends a signal to the processor and makes the processor do something. An example of polling is the anti-lock braking system in a car which constantly checks for inputs. An example of an interrupt is when a user clicks the mouse on a computer and the mouse click interrupts the processor with a command.

#2 from Atmel Atmega128 data sheet

2. EICRA: 3 to 0 are external pins when the SREG I-flag is set, bits 7-0 are ISC bits
EICRB: Bits 7-0 are ISC bits and bits 7-4 are sense control bits. External interrupts are activated by bits 7-4 if the SREG I-Flag and interrupt mask is set.
EIMSK: Bits 7-0 are INT bits and external interrupt bits.
3. An interrupt vector is an address in the program memory associated with the interrupt.
Timer/Counter Overflow: \$0020, External Interrupt 5: \$000C, USART Tx: \$0028.
4. A. 5-7 and 17-18
B. 2-3, 8-9
C. 3-5, 9-17
D. 1-2, 6-8, 18-21