

- (5) Question 1. Number of decimal digits
- (5) Question 2. Decimal value
- (2) Part 3a. Specify **RegB**
- (2) Part 3b. Specify **0 or 1**
- (1) Part 3c. Specify **0 or 1**
- (5) Question 4. Choose A-E
- (5) Question 5. Show the machine code

2000 alternatives is 3 ½ decimal digits
$\$A5 = 10*16+5=165$
$RegB = 100+200-256 = 44$
C=1 (error, 100 + 200 is not 44)
V=0 (no error, 100 + -54 = 44)
E. ldy TCNT
rr110nnn, with rr=10 nnn=001
EDB1 ldy 2,sp+
bset DDRT,#\$40
or
ldaa DDRT
oraa #\$40
staa DDRT

- (5) Question 6. Show assembly

- (5) Question 7. Simplified memory cycles (you may or may not need all 5 entries)

R/W	Addr	Data
Read	\$F000	DD
Read	\$F001	00
Read	\$0000	00
Read	\$0001	01

- (5) Question 8. Choose A-G
- (5) Question 9. Give value of number
- (5) Question 10. Effective address
- (5) Question 11. Give op code
- (5) Question 12. Number of bytes/sec
- (5) Question 13. Choose A, B, C or D.
- (5) Question 14. Matrix equation
- (5) Question 15. ADC conversion
- (5) Question 16. LED equation
- (5) Question 17. List all registers
- (5) Question 18. Choose A-E

E) Value of Reg D is copied to Reg X
$2000*1/4 = 500$
$EA=X+A=\$0800+5= \0805
bls
$9600(\text{bits/s})/10(\text{bits/frame}) = 960 \text{ bytes/s}$
B
C. $\text{base}+I+4*J$
$255*1.00V/5V = 51$
$I_d = (5 - V_d - V_{OL})/R_I$
A. all registers but the SP
B. array containing list of functions to execute
org \$0800
*****C) place it here *****
org \$F000
org \$F000
*****D) place it here *****
main movw #SA,pt

- (5) Question 19a) Choose A-F

- (5) Question 19b) Choose A-F