



2)

$$50000 + 75x = 450,000 + 42x$$

$$33x = 400,000$$

$$x = 12121.21$$

3) Clock

4) Modport

5) Interpretation

6)

T	A	B	C	D	E	F	
0	0	?	?	?	20	?	
15	0	?	6	?	15	1	$C \leftarrow 1$ to 6
15	5	?	6	?	15	1	$A \leftarrow A + 5$
15	5	?	6	?	20	1	$E \leftarrow A + 5$
15 + Δ	5	?	6	?	20	6	$F \leftarrow C + 5$
19	5	23	6	?	20	6	$C \leftarrow E + 3$
25	5	23	6	8	20	6	$D \leftarrow C + 2$

7) false

8) true

9) fun out

10) event


```

11) interface serial (input bit clk);
    logic Tx D, Rx D, RTS, CTS, DSR, DTR, DCD, EI;

    clocking cb (negedge clk);
        output Tx D, RTS, DTR;
        input Rx D, CTS, DSR, DCD, EI;
    endclocking
endinterface

```

12) embedded

13) random

14) architecture behave of euclid is
 type state_type is (idle, load, calc, finish)
 registers X(15:0), Y(15:0)
 begin
 X <= X;

16) True

17) Generic

18) false

T	A	B	C	D	E	F	
0	0	1	1	X	20	X	
15	0	X	8	X	15	1	Ci=8
15	1	X	6	X	15	1	Ai=1
15	6						

21	A	$\frac{1}{8}$
	B	$\frac{1}{8}$
	C	$\frac{1}{8}$
	D	$\frac{1}{8}$
	E	0
	F	$\frac{1}{6}$
	G	$\frac{1}{6}$
	H	$\frac{1}{6}$
	I	$\frac{1}{6}$
	J	$\frac{1}{6}$
	K	$\frac{1}{6}$
	L	$\frac{1}{6}$
	M	$\frac{1}{6}$
	N	$\frac{1}{6}$
	O	$\frac{1}{6}$
	P	$\frac{1}{6}$