pg 277

T/F

$$a \vee (b \wedge c) = (a \vee b) \wedge (a \vee c)$$

$$a \wedge (b \vee c) = (a \wedge b) \vee (a \wedge c)$$

OR

| p | q | p V q |
|---|---|---|
| T | T | T |
| T | F | T |
| F | T | T |
| F | F | F |

num =input(" <enter">

while

- input

Pg 278 (#2)

not(p and Q) $\sim(p \wedge q)$

| p | q | $p \wedge q$ | $\sim(p \wedge q)$ |
|---|---|---|---|
| T | T | T | F |
| T | F | F | T |
| F | T | F | T |
| F | F | F | T |

(not P) and Q

$(\sim p) \wedge q$

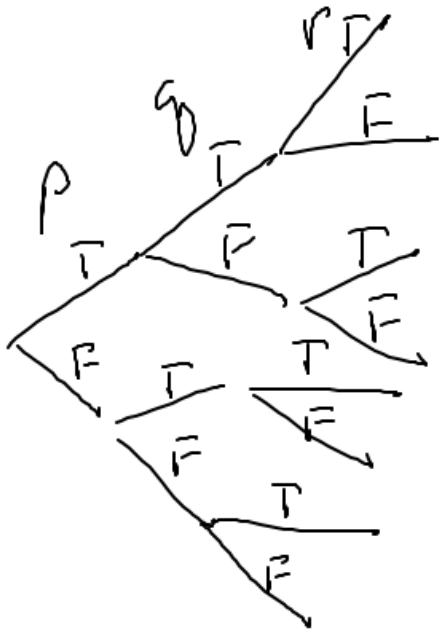
| p | q | $\sim p$ | $(\sim p) \wedge q$ |
|---|---|---|---|
| T | T | F | F |
| T | F | F | F |
| F | T | T | T |
| F | F | T | F |

(c) (P or R) and (Q or R)


| p | q | r | p ∨ r | (q ∨ r) | (p ∨ r) ∧ (q ∨ r) |
|---|---|---|---|---|---|
| T | T | T | T | T | T |
| T | T | F | T | T | T |
| T | F | T | T | T | T |
| T | F | F | T | F | F |
| F | T | T | T | T | T |
| F | T | F | F | T | F |
| F | F | T | T | T | T |
| F | F | F | F | F | F |

AND ("∧")

| $p$ | $q$ | $p \wedge q$ |
|---|---|---|
| T | T | T |
| T | F | F |
| F | T | F |
| F | F | F |


r
T
F
q
T
p
T
F
T
F
F
T
T
F
F
T
F

pg 279

Programming Exercise

(#3)

input: investment amount

APR

output: number of years required for investment to "double"

e.g. $100 → 148.71 204.35 ✓

stop ≥ 2×

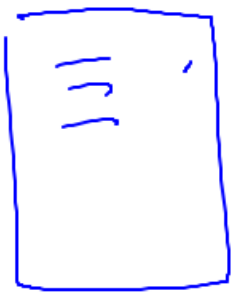
for example (e.g.) 5%

formula

$$prin = prin(1 + APR)$$

APR → .05

PA #3 — Truth Tables



PA #4 Chp 3

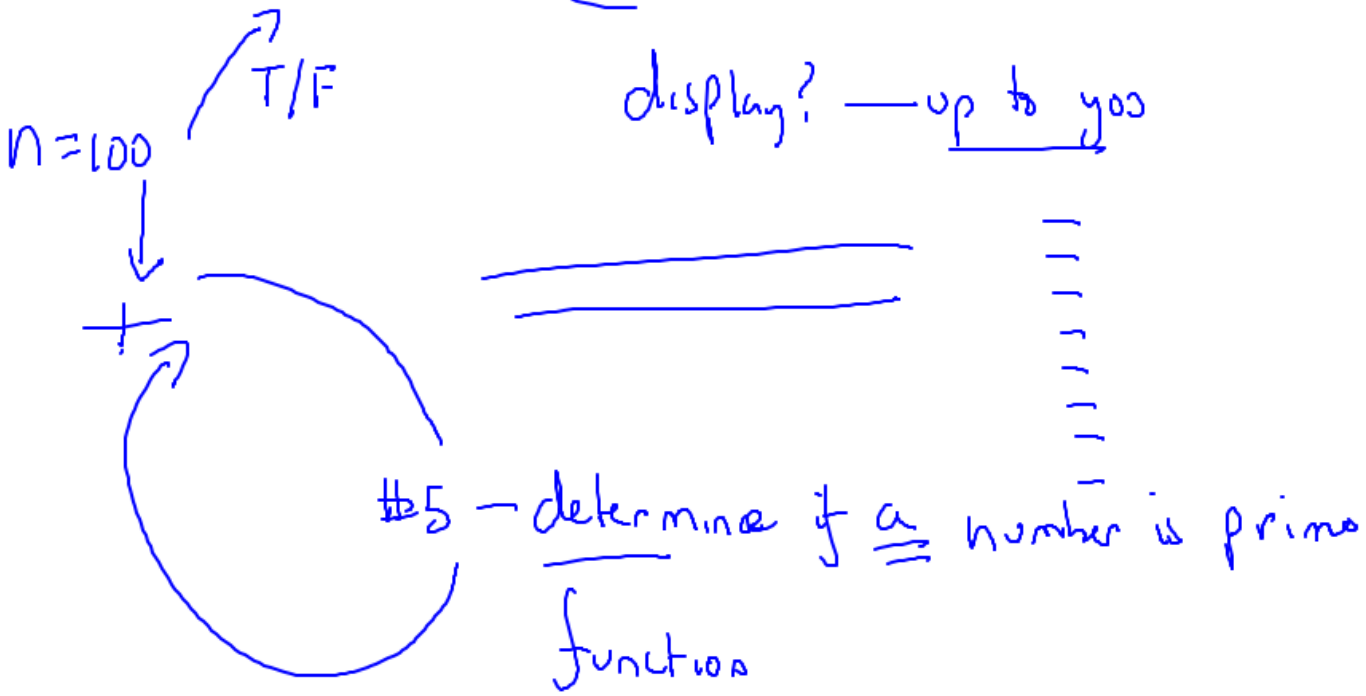
#6 (requires #5) — pg 230

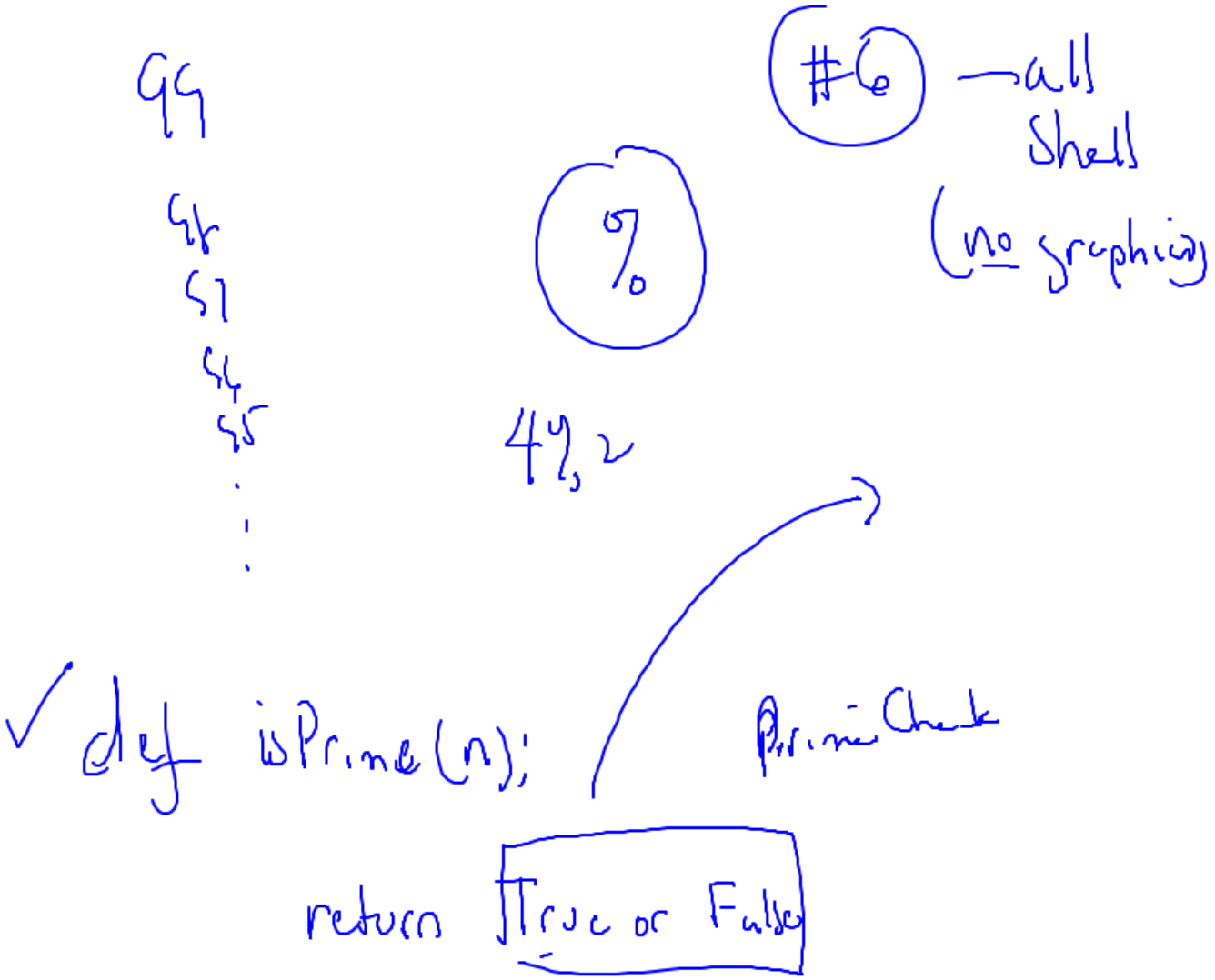
#13

Combo of #14 & 15

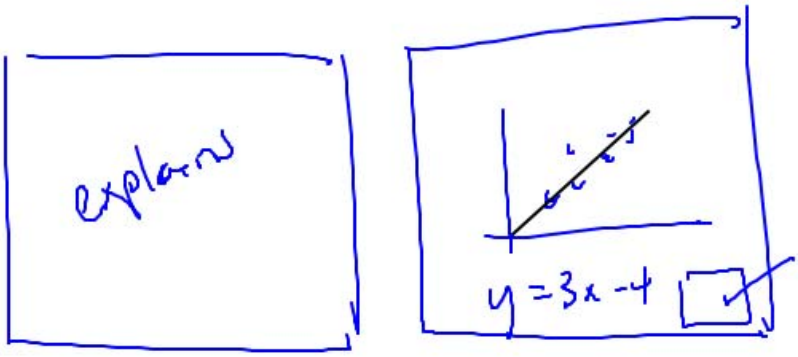
#6 input: n (positive integer)

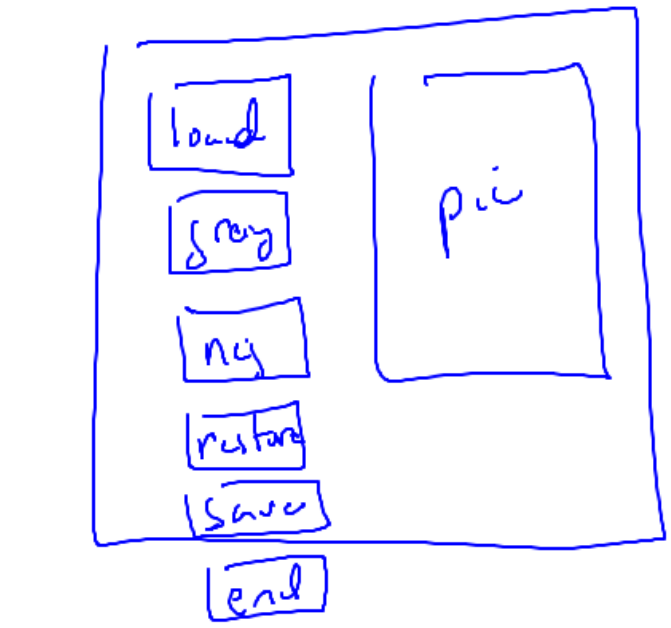
output: (all prime numbers) ≤ n




#6 — all Shells (no graphics)
%
49,2
def isPrime(n):
Prime Check
return True or False

#13 — all graphical




load
gray
ng
rotate
save
end
pic