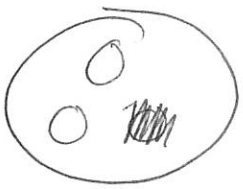
7-Step Process w/ Pancake Problem in more detail

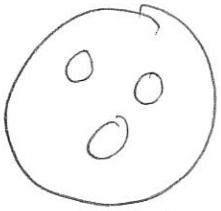
Step 1 Work examples by hand

Pansize = 3 numpancakes = 2



→ 10 min

Pansize = 3 numpancakes = 6

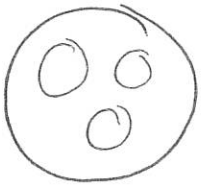


→ 10 min

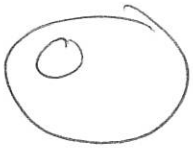
→ 10 min

> 20 min

Pansize = 3 numpancakes = 4



→ 10 min



→ 10 min

> 20

Step 2 Write down what you did in words

If pansize is 3 and numpancakes is 2, then 10 minutes

If pansize is 3 and numpancakes is 6, then 20 minutes

If pansize is 3 and numpancakes is 4, then 20 minutes

Step 3 Generalize

If numpancakes $\leq$ pansize
answer is 10

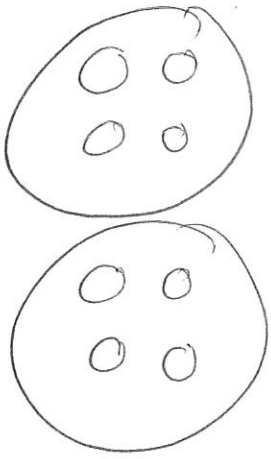
If numpancakes / pansize has no remainder (which means evenly divides)
answer is numpancakes/pansize*10

If numpancakes / pansize has a remainder
answer is numpancakes/pansize*10 + 10

Step 4

Work another example

pansize 4, 8 pancakes



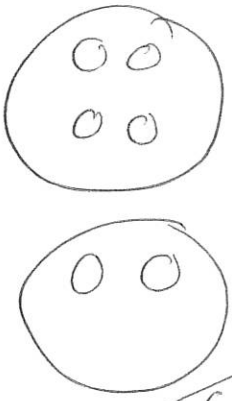
→ 10 min

→ 10 min

> 20

Check
8/4 = 2 * 10 = 20 ✓

pansize 4, 6 pancakes



→ 10 min

→ 10 min

> 20

Check
6/4 = 1
1 * 10 + 10 = 20 ✓

Step 5

code

Step 6

test

Step 7

debug →

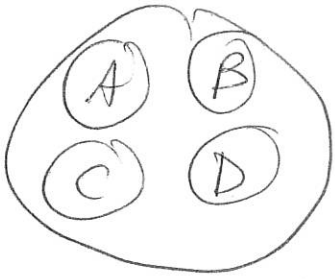
Step 7 Debug

Run APT -

pansize = 4, 6 pancakes
answer is 15!
Oh NO!

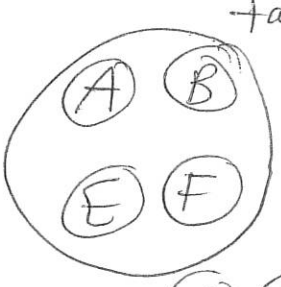
Debug

Pancakes (A) (B) (C) (D) (E) (F)



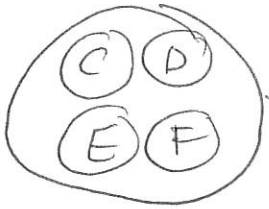
→ 5 min

take (C) & (D) out



→ 5 min

(A) (B) DONE
(C) (D) (E) (F) → need 5 more min



→ 5 min

total 15 min

If (numpancakes mod pansize) / pansize is less than or equal to 0.5 then answer is ?

you finish