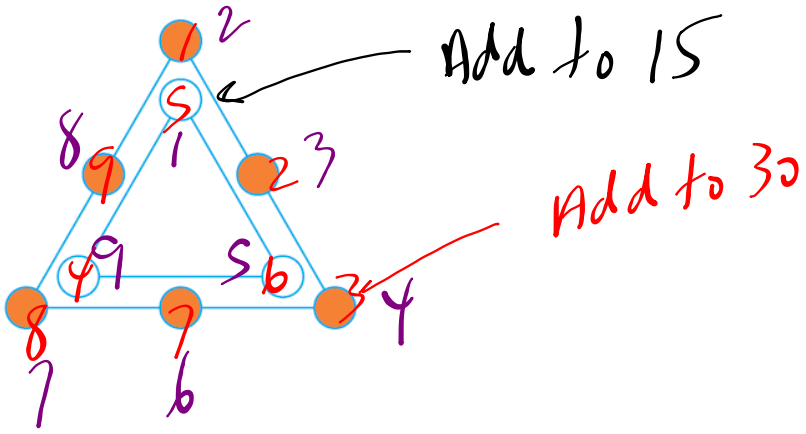
HOMEWORK...

p. 48: #1 - 13
(OMIT #5, 8, 10, 11)

Questions
(12) (2) (13) (4)

2. Copy this diagram. Place the digits 1 through 9 in the circles so that the sum of the numbers on the outside triangle is double the sum of the numbers on the inside triangle. Explain whether more than one solution is possible.

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1+2+3+4+5+6+7+8+
9
                  45
30+15
                  45
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4. a) Substitute numbers for the letters to create an addition problem with a correct answer.

b) How many solutions are possible?

$$\begin{array}{r} y \\ xxx \\ xxx \\ xxx \\ +\ xxx \\ \hline yxxx \end{array}$$

a) 1) $x = 3$, $y = 1$

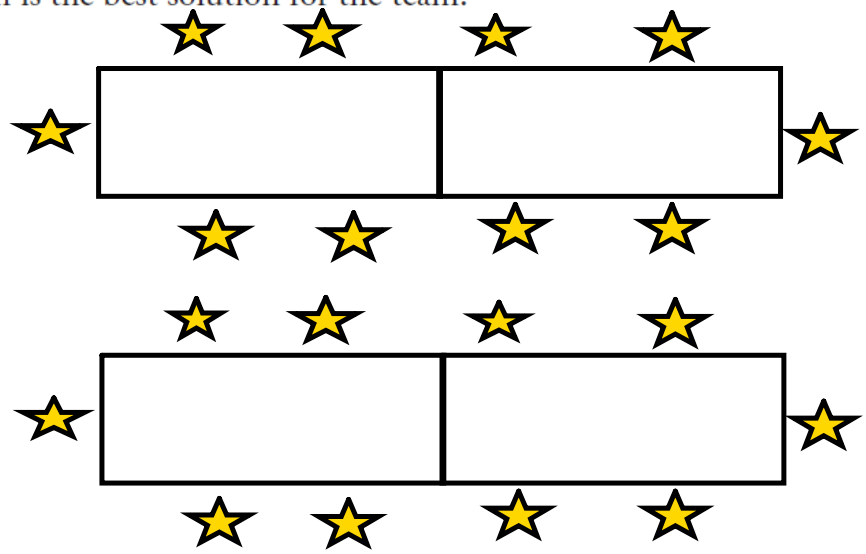
b) $x = 6$, $y = 2$

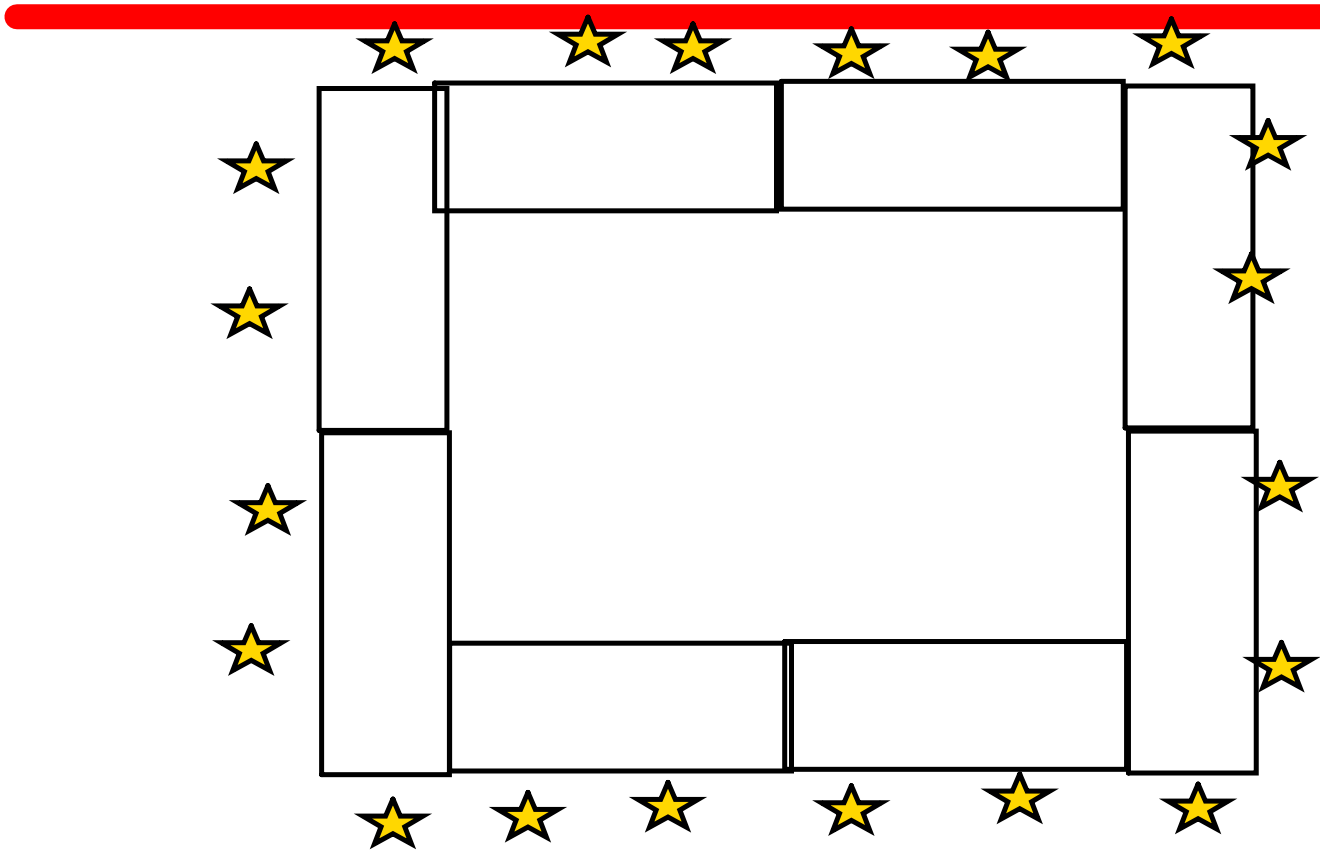
c) $x = 9$, $y = 3$

2. At lunchtime, a soccer team meets in the school cafeteria to help organize a tournament. There are 18 players and 2 coaches at the meeting. The tables in the cafeteria are rectangular. Two people can sit on each of the long sides, and one person can sit at each end.

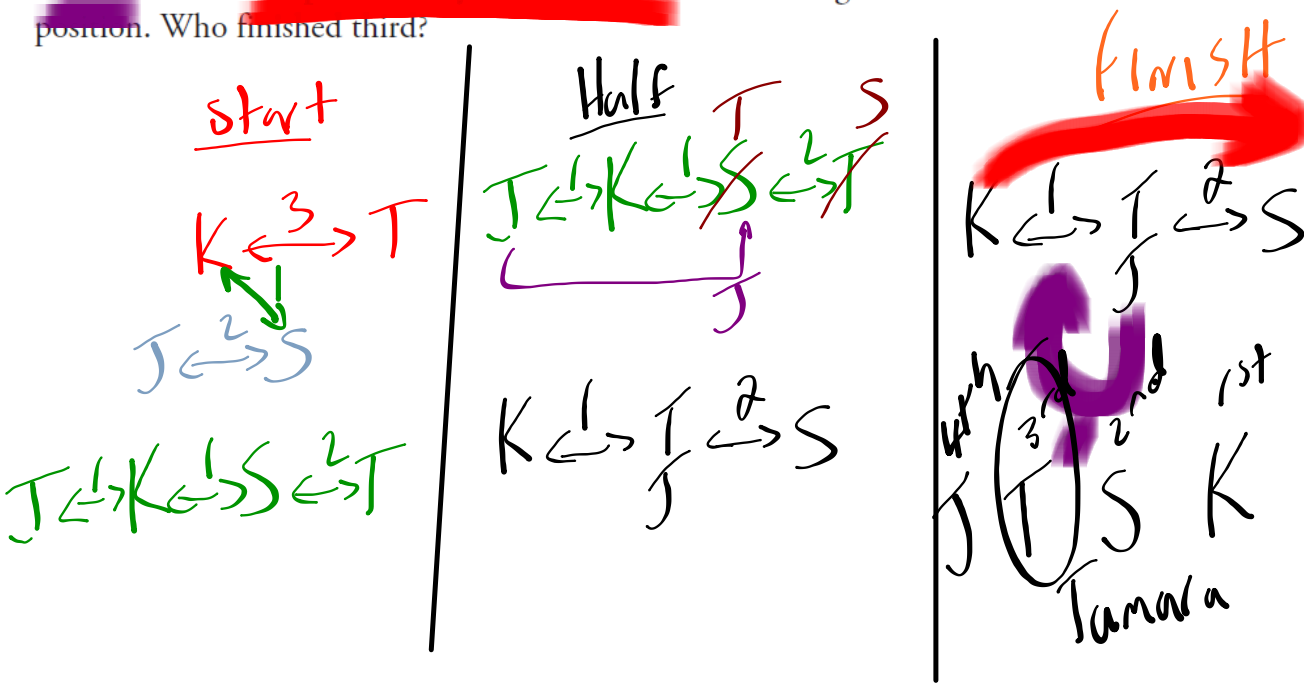
a) What arrangement of tables would enable the team members to sit as close to each other as possible, so that everyone can be heard?

b) Compare your solution with other students' solutions. As a group, decide which is the best solution for the team.





13. Early in a bicycle race, Tamara led Kateri by 3 km, while Justine was behind Shreya by 2 km. Shreya was ahead of Kateri by 1 km. By the halfway point, Tamara and Shreya had exchanged places, but they were still the same distance apart. Justine had pulled even with Tamara. Over the last part of the race, Justine dropped 1 km behind Tamara, and Kateri passed Shreya; there were no other changes of position. Who finished third?



WARM-UP...

1. Grab a calculator. (you won't be able to do this one in your head)
2. Key in the first three digits of your phone number (NOT the area code)
3. Multiply by 80
4. Add 1
5. Multiply by 250
6. Add the last 4 digits of your phone number
7. Add the last 4 digits of your phone number again.
8. Subtract 250
9. Divide number by 2

Do you recognize the answer?

WHY??? Prove by deduction...

$80(100a + 10b + c)$.

$250(8000a + 800b + 80c + 1)$

$2000000a + 200000b + 20000c + 250 + 2000d + 200e + 20f + 2g$

WARM UP PROBLEM: Need 4 gallons using only a 3 and 5 gallon jugs???

5 → 3
empty
5 → 3

5 → 3
empty
2 → 3 (1 air)
5
(4 left)

SOLUTIONS...

Step 1. Fill 5 gallon jug

Step 2. Pour 5 gallon jug into 3 gallon jug, leaving 2 remaining gallons in 5 gallon jug.

Step 3. Empty 3 gallon jug.

Step 4. Pour 2 gallons from 5 gallon jug into 3 gallon jug, leaving 1 gallon of empty space.

Step 5. Refill 5 gallon jug.

Step 6. Pour water from 5 gallon jug into 3 gallon jug, which already has 2 gallons in it, and only 1 gallon of empty space, leaving exactly 4 gallons in the 5 gallon jug.

Nick

there is an alternate way to solve this:

1. fill the 3 gallon jug
2. pour that 3 gallons into the 5 gallon jug
3. refill the 3 gallon jug
4. fill the 5 gallon jug to the top, leaving 1 gallon in the 3 gallon jug
5. empty the 5 gallon jug
6. pour the 1 gallon from the 3 gallon jug into the 5 gallon jug
7. refill the 3 gallon jug
8. pour that 3 gallons into the 5 gallon jug which already has 1 gallon in it for a total of 4 gallons.

(3 gal)
2 more

Assignment -> TRY ALL S!

* Quiz on Tuesday

Text Ch. 1 Practice (omit 1.7)

Self Test

FAQ