FAMILY MATH CHALLENGE SOLUTIONS
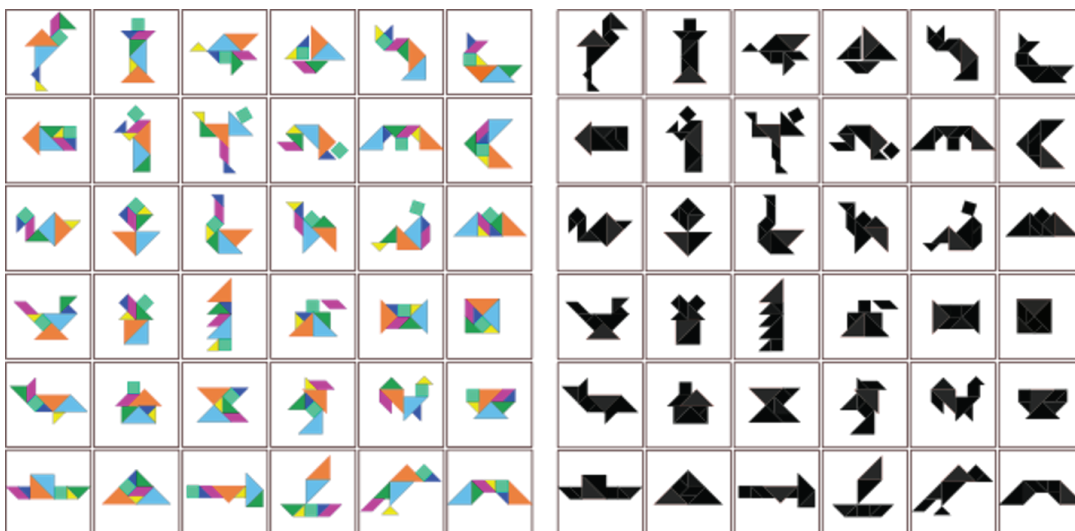
1. 10 different sums

2. Many possible solutions. How many can you find?

3. Answer:
   a. Two men can play.
   b. Novak won't play if Rafael plays.
   c. So the two men must be Roger and Novak or Roger and Rafael.
   d. Roger will only play if Sloane plays.
   e. Sloane won't play with Novak.
   f. So the two men are Roger and Rafael.
   g. Rafael will only play if Venus plays.
   h. So the two women are Sloane and Venus

4. Some possible solutions: 3x5, 2x5+4+1, 7x3-6

5. Answers:
   a. Sum of 36? Answer: 11, 12, 13
   b. Sum of 90? Answer: 21, 22, 23, 24
   c. Bonus question! Chris Evert, '75-'78 and Roger Federer, '04-'08

6. 3 times (Day 6, 12, and 18)

7. 15 girls on the team

8. 2 hours or 120 minutes

9. Examples like these can be found on the internet. On the left, for younger students, on the right, for older students

10. 6 total head-nods