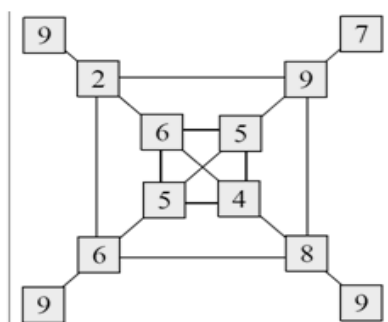


Mathematical Puzzles

1. How can I get the answer 24 by only using the numbers 8,8,3,3. You can use the main signs add, subtract multiply and divide. You can use a sign more than once and you don't have to use all signs.
2. Use \times , $+$, \div , $-$ to work out the following calculations. You can use a sign more than once and you don't have to use all signs:
 - a. Use four 4's to make 44
 - b. Use five 5's to make 55
 - c. Use six 6's to make 66
3. Using the numbers 2, 4, 6 and 8 and the signs $+$ and \times what is the largest number you can make?
4. Put the following numbers into the grid below so that each row, column and diagonal adds up to 0: -4, -3, -2, -1, 0, 1, 2, 3, 4

5. Start anywhere and add 5 numbers by following the paths- no jumping or going back over numbers. What is the highest total you can make?



6. When asked about his birthday, a man said: "The day before yesterday I was only 25 and next year I will turn 28." This is true only one day in a year - when was he born?

Maths Puzzle Solutions

1. $8/(3-(8/3))= 8/(1/3)= 24$
2. a. $-4 + 4 = 44$ or $44 \times 4 \div 4 = 44$
 b. $(5 \times 5) + (5 \times 5) + 5$ or $55 \div 5 \times 5 = 55$ or $5 \div 5 + 5 + 5 \times 5$
 c. $66 - 6 + 6 - 6 + 6$ or $(6 + 6) \times 6 + 6 - 6 - 6$
3. $82 \times 64 = 5248$ or 8642
- 4.

-1	-2	3
4	0	-4
-3	2	1

3	-4	1
-2	0	2
-1	4	-3

-3	2	1
4	0	-4
-1	-2	3

1	-4	3
2	0	-2
-3	4	-1

5. $9+8+9+5+6=37$
6. He was born on December 31st and spoke about it on January 1st.

- Making numbers from the number 4:

$$0 = 44-44$$

$$1 = 44/44 \text{ or } (4+4)/(4+4) \text{ or } (4/4) / (4/4) \text{ or } [(4! - 4) / 4] - 4$$

$$2 = 4/4+4/4 \text{ or } (4^2-4-4)/4$$

$$3 = (4+4+4)/4$$

$$4 = 4*(4-4)+4$$

$$5 = (4*4+4)/4$$

$$6 = 4*.4+4.4$$

$$7 = 44/4-4$$

$$8 = 4+4.4-.4$$

$$9 = 4/4+4+4$$

$$10 = 44/4.4$$