

Num of bivalent vertices:	Bit code	Vertex name	Face name (Bivalent items are italicized.)	Vertex name	Bit code
	None		2	3	4
None	0000	Vector space	Logic	Set theory	0010
	0100	Undecidability		Self non refer.	0110
2	0100	Undecidability	Algebra	Self non refer.	0110
	0101	Finite numbers		Bivalency	0111
4	0101	Finite numbers	Geometry and topology	Bivalency	0111
	0001	Self referencing		Decidability	0011
2	0001	Self referencing	Calculus and analysis	Decidability	0011
	0000	Vector space		Set theory	0010
4	1000	Replication	Irrational radix arithmetic	Recursion	1010
	1100	Comb. obj. proc.		Persistent object	1110
4	1100	Comb. obj. proc.	Hardware	Persistent object	1110
	1101	Volatile object		Arithmetic proc.	1111
4	1101	Volatile object	Turing	Arithmetic proc.	1111
	1001	Iteration		Assignment	1011
4	1001	Iteration	Software	Assignment	1011
	1000	Replication		Recursion	1010
4	1110	Persistent object	Sequential state machine	Recursion	1010
	1111	Arithmetic proc.		Assignment	1011

4	0001 Self referencing		Decidability 0011
		Game theory	
	1001 Iteration		Assignment 1011
4	0101 Finite numbers		Bivalency 0111
		Signal processing	
	1101 Volatile object		Arithmetic proc. 1111
4	0111 Bivalency		Decidability 0011
		Cryptology	
	1111 Arithmetic proc.		Assignment 1011
4	0001 Self referencing		Finite numbers 0101
		Information theory	
	1001 Iteration		Volatile object 1101

3	0000 Vector space		Self referencing 0110
		Dynamical systems	
	1000 Replication		Iteration 1001

3	0011 Decidability		Set theory 0010
		Probability	
	1011 Assignment		Recursion 1010

2	0010 Set theory		Vector space 0000
		Differential equations	
	1010 Recursion		Replication 1000

2	0011 Decidability		Set theory 0010
		Combinatorics	
	0111 Bivalency		Self non-refer. 0110

2	0100 Undecidability		Self non-refer. 0110
		Mathematical physics	
	1100 Comb obj proc.		Persistent object 1110

3	0101: <i>Finite numbers</i>	Statistics	Undecidability: 0100
	1101: <i>Volatile objects</i>		Combin. obj. proc.: 1100

2	0100: Undecidability	Quantum logic	Vector space: 0000
	1100: <i>Combin. obj. proc.</i>		Replication: 1000

2	0101: <i>Finite numbers</i>	Number theory	Self-referencing: 0001
	0100: Undecidability		Vector space: 0000

3	0110: <i>Self non refer.</i>	Computing	Bivalency: 0111
	1110: <i>Persistent object</i>		Arithmetic proc.: 1111

2	0010: <i>Set theory</i>	Operations research	Self non-refer.: 0110
	1010: <i>Recursion</i>		Persistent object.: 1110

4	1000: <i>Replication</i>	interface	Iteration: 1001
	1100: <i>Combin. obj. proc.</i>		Volatile object: 1101

Summary and Breakdown

The 5- bivalent branches of mathematics:

Geometry and Topology; Information Theory; Game Theory;
Cryptology; Signal Processing

The 6- bivalent branches of computer science:

Turing Machine; Software; Hardware;
Interface; Sequential State Machine; Irrational Radix Arithmetic

13-non bivalent branches of mathematics (ranked by number of bivalent vertices):

4 (3) Dynamical Systems; Probability; Statistics; Computing

8 (2) Algebra; Calculus and Analysis; Differential Equations; Combinatronics;

Mathematical Physics; Quantum Logic; Number Theory; Operations Research

1 (None) Logic

Total 24- faces of the tesseract