

All combinations should be a **minimum** sufficient set to prove the given object.  
If you have any questions, please e-mail [sales@gamesforthemind.com](mailto:sales@gamesforthemind.com).

*“I truly hope you enjoy helping your children, students, family and friends in their discovery of quadrilateral shapes.” –Walter Poelzing*

Parallelogram

7,8	23,24
7,23	23,30
7,25	24,25
8,24	25,30
8,30	29
9,13	

Rhombus

*Card 23 not necessary to proof 13,23,28,32 though it would still be a proof.*

1,2,5	9,13,20	24,25,26
1,2,8	9,13,26	24,25,28
1,5,7	9,13,28	24,25,32
1,7,8	9,13,32	25,26,30
1,29	13,24,28	25,28,30
1,9,13	13,23,28,32	25,30,32
2,5,7	20,23,24	
2,5,8	20,23,26	
2,7,8	20,23,30	
2,9,13	20,25,30	
2,29	23,24,26	
5,7,8	23,24,28	
5,9,13	23,24,32	
5,29	23,28,30	
7,8,20	23,30,32	
7,8,26		
7,8,28		
7,8,32		

Square

*Card 9 is not needed in proofs 1,2,5,9,10/ 1,7,8,9,10 and 2,7,8,9,10, though this would still be a correct proof. 6,23,29 is incorrect.*

1,2,5,6	2,7,8,15	7,8,16,28
1,2,5,9,10	2,7,8,16	7,8,16,32
1,2,5,11	2,7,8,18	7,8,18,20
1,2,5,12	2,10,15,16	7,8,18,26
1,2,5,15	2,11,29	7,8,18,28
1,2,5,16	2,12,29	7,8,18,32
1,2,5,18	2,15,29	9,16,18,26
1,2,8,10	2,16,18,23	9,16,18,28
1,2,8,11	2,16,18,24	9,16,18,32
1,2,8,12	2,16,18,25	10,15,16,26
1,2,8,15	2,16,18,30	10,15,16,28
1,2,8,16	2,16,29	10,15,16,32
1,2,8,18	2,18,29	10,16,18,26
1,5,12,23	5,10,15,16	10,16,18,28
1,5,12,25	5,11,29	10,16,18,32
1,5,15,23	5,16,18,23	12,23,24,26
1,5,15,25	5,16,18,24	12,23,24,28
1,7,8,9,10	5,16,18,25	12,23,24,32
1,7,8,11	5,16,18,30	12,23,26,30
1,7,8,12	5,16,29	12,23,28,30
1,7,8,15	5,18,29	12,23,30,32
1,7,8,16	6,7,8,10	12,24,25,26
1,7,8,18	6,7,8,11	12,24,25,28
1,10,15,16	6,7,8,16	12,24,25,32
1,11,29	6,7,8,18	15,23,24,26
1,12,29	6,7,8,20	15,23,24,28
1,15,29	6,7,8,26	15,23,24,32
1,16,29	6,7,8,28	15,23,26,30
1,16,18,23	6,7,8,32	15,23,28,30
1,16,18,24	6,23,24,26	15,23,30,32
1,16,18,25	<del>6,23,29</del>	15,24,25,26
1,16,18,30	6,26,29	15,24,25,28
1,18,29	7,8,10,20	15,24,25,32
2,5,6,7	7,8,10,26	
2,5,6,8	7,8,10,28	
2,5,7,10	7,8,10,32	
2,5,7,11	7,8,11,20	
2,5,7,12	7,8,11,26	
2,5,7,15	7,8,11,28	
2,5,7,16	7,8,11,32	
2,5,7,18	7,8,12,20	
2,5,8,10	7,8,12,26	
2,5,8,11	7,8,12,28	
2,5,8,12	7,8,12,32	
2,5,8,15	7,8,15,20	
2,5,8,16	7,8,15,26	
2,5,8,18	7,8,15,28	
2,7,8,9,10	7,8,15,32	
2,7,8,11	7,8,16,20	
2,7,8,12	7,8,16,26	

Rectangle

~~12,24,30~~  
~~15,24,30~~  
6,7,8  
6,23,24  
6,25,30  
7,8,10  
7,8,11  
7,8,12  
7,8,15  
7,8, 16  
7,8, 18  
9,10,11  
9,10,12  
9,10,13  
9,10,15  
9,10,18  
9,11,12  
9,11,13  
9,11,15  
9,11,16  
10,11,12  
10,11,15  
10,11,16  
10,11,18  
10,12,13  
10,12,16  
10,15,16  
10,23,24  
10,23,30  
10,24,25  
10,23,30  
10,29

*Cards 12,24,30 and 15,24,30 do NOT form a proof of a rectangle*

11,12,13  
11,12,15  
11,12,16  
11,12,18  
11,23,24  
11,23,30  
11,24,25  
11,23,30  
11,29  
12,13,15  
12,13,16  
12,13,18  
12,15,23  
12,15,25  
12,23,24  
12,23,30  
12,24,25  
~~12,24,30~~  
12,25,30  
12,29  
13,15,16  
13,15,18  
15,23,24  
15,23,30  
15,24,25  
~~15,24,30~~

15,25,30  
15,29  
16,18,23  
16,18,24  
16,18,25  
16,18,30  
16,23,24  
16,23,30  
16,24,25  
16,25,30  
16,29  
18,23,24  
18,23,30  
18,24,25  
18,25,30  
18,29

Right Trapezoid

3,11,12  
3,11,23  
3,11,25  
3,12,23  
3,12,25  
4,11,23  
4,11,25  
4,12,23  
4,12,25

*Angle C (and A) can be inferred to be 90 degrees by the picture.*

11,12,14  
11,12,17  
11,12,19  
11,12,21  
11,12,31  
11,19,23  
11,19,25  
11,21,23  
11,23,31  
11,25,31  
12,19,23  
12,19,25  
12,21,23  
12,21,25  
12,23,31  
12,25,31

Isosceles Trapezoid

6,19,23  
6,19,25  
8,19,23  
10,19,23  
10,19,25  
18,19,23  
18,19,25

Regular Trapezoid

4,23  
4,25  
14,23  
14,25  
17,23  
17,25  
23,31  
25,31

*Note: 19, 23 is a trapezoid but not guaranteed to be a regular trapezoid!*

Kite- *Non-Rhombus*

1,3,26  
1,3,32  
1,4,26  
1,4,32  
3,28,32  
4,28,32  
9,14,28  
9,14,32

**This Kite is assumed *not* to be a Rhombus**

19,26,28  
19,26,32  
19,28,32  
26,27,28  
26,27,32  
26,34  
28,34  
32,34