

Odd one out

Take a look at the following list of 50 mathematical words.

Acute, Angle, Arc, Area, Chord, Circle,
Circumference, Cone, Cube, Cuboid, Cylinder,
Decagon, Diagonal, Diameter, Equilateral, Face,
Heptagon, Hexagon, Horizontal, Isosceles, Kite,
Length, Line, Nonagon, Obtuse, Octagon, Parallel,
Parallelogram, Pentagon, Perpendicular, Plane,
Polygon, Prism, Pyramid, Radius, Rectangle, Reflex,
Rhombus, Scalene, Sector, Segment, Sphere, Square,
Tangent, Tetrahedron, Trapezium, Triangle, Vertex,
Vertical, Volume.

Explain which word is the *odd one out* in the following sets of words.

Question 1

Rectangle	
Hexagon	
Kite	
Parallelogram	

Question 2

Tetrahedron	
Sphere	
Nonagon	
Prism	

Question 3

Diameter	
Segment	
Chord	
Scalene	

Question 4

Diagonal	
Reflex	
Obtuse	
Acute	

Explain which word is the *odd one out* in the following sets of words.

Question 5

Face
Line
Plane
Area

Question 6

Radius
Chord
Tangent
Sector

Question 7

Nonagon
Hexagon
Pentagon
Heptagon

Question 8

Scalene
Equilateral
Vertex
Isosceles

Explain which word is the *odd one out* in the following sets of words.

Question 9

Cone	
Cylinder	
Circle	
Tetrahedron	

Question 10

Square	
Kite	
Rectangle	
Parallelogram	

Now create your own questions using the list above.
Be prepared to **justify** your selections.

Question 1

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Question 2

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Question 3

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Question 4

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ANSWERS

1. *Hexagon* because the other three words refer to quadrilaterals (a hexagon has six sides, not four).
2. *Nonagon* because the other three words refer to 3-D shapes (a nonagon is a 2-D shape).
3. *Scalene* because the other three words refer to parts of a circle (scalene refers to a type of triangle).
4. *Diagonal* because the other three words refer to types of angle (a diagonal is a line joining two vertices of a polygon).
5. *Line* because the other three words are 2-D objects (a line is a 1-D object).
6. *Sector* because the other three words refer to different lines in/outside a circle (a sector has area and is not a line).
7. *Hexagon* because the other three words refer to polygons with an odd number of sides (a hexagon has six sides).
8. *Vertex* because the other three words refer to types of triangle (a vertex is a point or corner of a shape).
9. *Circle* because the other three words refer to 3-D shapes (a circle is a 2-D shape).
OR *Tetrahedron* because the other three words refer to shapes with at least one circular face (a tetrahedron has four triangular faces).
10. *Parallelogram* because the other three words refer to shapes with two pairs of parallel sides (a kite has no pairs of parallel sides).