

Questions on Definitions

Short-answer, multiple-choice, and select-all questions about definitions.

Question 1 An *equilateral quadrilateral* is called a .

Question 2 An *equiangular quadrilateral* is called a .

Question 3 An *regular quadrilateral* is called a .

Question 4 An *line segment between two points on a circle* is called a of the circle.

Question 5 A measures 180° . (Hint: Answer with two words.)

Question 6 Two angles whose measures sum to 180° are said to be .

Question 7 Two angles whose measures sum to 90° are said to be .

Question 8 Three (or more) points that lie on the same line are said to be .

Question 9 Three (or more) lines that lie on the same point are said to be .

Question 10 In a circle, the measure of an angle is the measure of the corresponding central angle. (Hint: For the second blank, answer with a word.)

Question 11 An *altitude* in a triangle ...

Multiple Choice:

- (a) contains the midpoint of the side of a triangle and is perpendicular to that side.
 - (b) contains a vertex of a triangle and is perpendicular to the line containing the other side. ✓
 - (c) contains a vertex of a triangle and the midpoint of the opposite side.
 - (d) contains a vertex and bisects that angle.
 - (e) none of these.
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Question 12 A *median* in a triangle ...

Multiple Choice:

- (a) contains the midpoint of the side of a triangle and is perpendicular to that side.
 - (b) contains a vertex of a triangle and is perpendicular to the line containing the other side.
 - (c) contains a vertex of a triangle and the midpoint of the opposite side. ✓
 - (d) contains a vertex and bisects that angle.
 - (e) none of these.
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Question 13 The *circumcenter* of a triangle is ... [select all]

Select All Correct Answers:

- (a) the point of concurrency of the medians.

- (b) *the point of concurrency of the angle bisectors.*
 - (c) *the point of concurrency of the perpendicular bisectors. ✓*
 - (d) *the point of concurrency of the altitudes.*
 - (e) *the balance point for the triangle.*
 - (f) *the center in the triangle.*
 - (g) *the center of the incircle.*
 - (h) *the center of the circumcircle. ✓*
 - (i) *equidistant from the sides of the triangle.*
 - (j) *equidistant from the vertices of the triangle. ✓*
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Question 14 *The **incenter** of a triangle is ... [select all]*

Select All Correct Answers:

- (a) *the point of concurrency of the medians.*
 - (b) *the point of concurrency of the angle bisectors. ✓*
 - (c) *the point of concurrency of the perpendicular bisectors.*
 - (d) *the point of concurrency of the altitudes.*
 - (e) *the balance point for the triangle.*
 - (f) *the center in the triangle.*
 - (g) *the center of the incircle. ✓*
 - (h) *the center of the circumcircle.*
 - (i) *equidistant from the sides of the triangle. ✓*
 - (j) *equidistant from the vertices of the triangle.*
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Question 15 *The **centroid** of a triangle is ... [select all]*

Select All Correct Answers:

- (a) *the point of concurrency of the medians. ✓*

- (b) *the point of concurrency of the angle bisectors.*
 - (c) *the point of concurrency of the perpendicular bisectors.*
 - (d) *the point of concurrency of the altitudes.*
 - (e) *the balance point for the triangle. ✓*
 - (f) *the center in the triangle.*
 - (g) *the center of the incircle.*
 - (h) *the center of the circumcircle.*
 - (i) *equidistant from the sides of the triangle.*
 - (j) *equidistant from the vertices of the triangle.*
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Question 16 *The **orthocenter** of a triangle is ... [select all]*

Select All Correct Answers:

- (a) *the point of concurrency of the medians.*
 - (b) *the point of concurrency of the angle bisectors.*
 - (c) *the point of concurrency of the perpendicular bisectors.*
 - (d) *the point of concurrency of the altitudes. ✓*
 - (e) *the balance point for the triangle.*
 - (f) *the center in the triangle.*
 - (g) *the center of the incircle.*
 - (h) *the center of the circumcircle.*
 - (i) *equidistant from the sides of the triangle.*
 - (j) *equidistant from the vertices of the triangle.*
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Question 17 *A **midsegment** in a triangle is ... [select all]*

Select All Correct Answers:

- (a) *a segment in the middle.*

Questions on Definitions

- (b) *a segment connecting the midpoints of two sides.* ✓
 - (c) *parallel to a side of the triangle.* ✓
 - (d) *perpendicular to a side of the triangle.*
 - (e) *also called a median.*
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