

Important Definitions

Multiple-choice and select-all questions about definitions.

Question 1 *An equilateral quadrilateral is called ...*

Multiple Choice:

- (a) a square.
 - (b) a rectangle.
 - (c) a rhombus. ✓
 - (d) a trapezoid.
 - (e) none of these.
-

Question 2 *An equiangular quadrilateral is called ...*

Multiple Choice:

- (a) a square.
 - (b) a rectangle. ✓
 - (c) a rhombus.
 - (d) a trapezoid.
 - (e) none of these.
-

Question 3 *When three (or more) points all lie on the same line, we say they are ...*

Multiple Choice:

- (a) coplanar.
-

Learning outcomes:
Author(s): Bart Snapp and Brad Findell

Important Definitions

- (b) *collinear*. ✓
 - (c) *conjoined*.
 - (d) *concurrent*.
 - (e) *none of these*.
-

Question 4 When three (or more) lines all lie on the same point, we say they are ...

Multiple Choice:

- (a) *coplanar*.
 - (b) *collinear*.
 - (c) *conjoined*.
 - (d) *concurrent*. ✓
 - (e) *none of these*.
-

Question 5 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.
-

Question 6 A *median* in a triangle ...

Multiple Choice:

Important Definitions

- (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.*
-

Question 7 *The **circumcenter** of a triangle is ...*

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. ✓*
-

Question 8 *The **incenter** of a triangle is ...*

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.*

Important Definitions

- (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.*
-

Question 9 *The **centroid** of a triangle is ...*

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.*
-

Question 10 *The **orthocenter** of a triangle is ...*

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. ✓*

Important Definitions

- (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.*
-

Question 11 *A midsegment in a triangle is . . .*

Select All Correct Answers:

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