Short-Answer Questions

Short-answer questions about definitions.

Question 1 *An* ***equilateral quadrilateral*** *is called a* $\boxed{rhombus}$.

Question 2 *An* ***equiangular quadrilateral*** *is called a* $\boxed{rectangle}$.

Question 3 *An* ***regular quadrilateral*** *is called a* $\boxed{square}$.

Question 4 *An line segment between two points on a circle is called a* $\boxed{chord}$ *of the circle.*

Question 5 *A* $\boxed{straightangle}$ *measures* 180°. *(Hint: Answer with two words.)*

Question 6 *Two angles whose measures sum to* 180° *are said to be* $\boxed{supplementary}$.

Question 7 *Two angles whose measures sum to* 90° *are said to be* $\boxed{complementary}$.

Question 8 *Three (or more) points that lie on the same line are said to be* $\boxed{collinear}$.

Question 9 *Three (or more) lines that lie on the same point are said to be* $\boxed{concurrent}$.

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Question 10 *In a circle, the measure of an* $\boxed{inscribed}$ *angle is* $\boxed{half}$ *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.*

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.*

Question 13 . *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 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.*

Question 15 *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 16 *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.* ✓

(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 17 *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.*