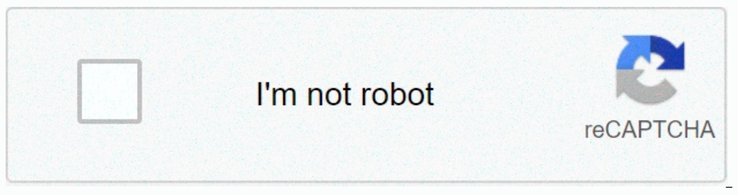

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Parallelogram rhombus rectangle square properties worksheet

Question 1 :D ecide that the statement below is always, sometimes or never true. The diamond is a rectangle2. Question :D ecide that the statement below is always, sometimes or never true. Paraleplography is a rectangle3. What else do you know about ABCD? Question 4: In the diagram on the right is the PQRS diamond. What is the value of y? Question 5: Prove that the diagonals of the diamond are perpendicular. Question 1, the :D ecide question whether the statement below is always, sometimes or never true.. The diamond is a rectangleRespond: The statement is sometimes true. In the Venn diagram above, the areas of the diamond and rectangles overlap. If the diamond is a square, it is a rectangle. Question 2 :D ecide that the statement below is always, sometimes or never true. Paraleplography is a rectangleRespond: The instruction is sometimes true. Some paralemagrams are rectangles. In the Venn chart above, you can see that some of the shapes in the parallelogram field are in the region of rectangles, but many are not. question 3: ABCD is a rectangle. What else do you know about ABCD? Answer: Because ABCD is a rectangle, it has four right angles by definition. The definition also states that rectangles are paraleviews. So ABCD has all the properties of the paralenogram :• The two pages are parallel and concurrent. • The opposite angles are mutually exclusive and the successive angles are complementary. • Diagonals cut each other in half. Question 4: In the diagram on the right is the PQRS diamond. What is the value of y? Answer: All four sides of the diamond are consistent, so vanRS = PSSubstitute RS = 5y - 6 and PS = 2y + 3.5y - 6 = 2y + 3Add 6 on both sides. 5y = 2y + 9Subtract 2y a 3y = 9 Divide both sides 3.y = 3Question 5 : Prove that the diagonals of the diamond are perpendicular. Answer : Consider the diamond PQRS as follows. In the diamond PQRS above, you need to provePR ⊥ QSPQRS is ≅ diamond, so there isPQ ≅ QRWhen the diamond PQRS is a paralegal, diagonal intersecting. So, there is PX ≅ RXPQ ≅ QRUsing SSS postulate, vanΔPXQ ≅ ΔRXQSo, is∠PXQ ≅ ∠RXQ ----> ∠PXQ = ∠RXQ∠PXQ, ∠RXQ to form a linear pair and ∠PXQ = ∠RXQ, is∠PXQ = ∠RXQ = 90°Why isPR ⊥ QS apart from the stuff specified in this section, if you need other things in math, please use google custom search here. If you have any feedback on our math content, please email us at v4formath@gmail.comI always appreciate your feedback. You can also visit the following websites for different things about mathematics. WORD PROBLEMSHCF and LCM word problemsWord problems simple equations Word problems linear equations Word problems second degree word problemsWord problems trainsArea and perimeter word problemsWord problems direct variation and inverse variation Word problems unit priceWord problems unit rate Word problems compare prices Word problems compare standard units word problems Convert metric units word problemsWord problems simple interestWord problems complex interestWord problems type angles complementary and complementary angles word problemsDupla facts word problemsTrigonometry word problemsPercent word problems Result and loss word problems Markup and markdown word problems decimal word problems fractionsWord problems mixed fractrionsA step equation word problemsLinear inequalities word problemsRatio and proportional word problemsTime and work word problemsWord problems sets and venn diagramsWord problems agesPythagorean theorem word problemsPercent a number word problemsWord problems constant speedWord problems average speed Word problems sum the angles of a triangle 180 degreesOTHER TOPICS Profit and lossshortcut Percentage, speed and distance shortcutsRatiokés ratio referencesDomain and a number of rational functions and a number of rational functions holesGraphing rational functionsGraph rational functions holesConverting repeating decimals in fractionsDecimional representation of rational numbersFinding square root using long divisionL . C.M method for solving time and work problemsTranslating word problems into algebraic expressionsTranslate 2 power 256 divided by 17Remainder, if you have 17 power 23 divided into 16To sum all three digits 6To sum all three digits can be divided into 7Sum all three digits can be divided into 8Sum all three digits number created based on 1, 3, 4Sum all three four-digit numbers formed using non-zero digitsSum all three four-digit numbers created using 0, 1, 2, 3Sum all three four-digit numbers created using 1 , 2, 5, 6 copyright onlinemath4all.com SBI! Before starting the introduction of paraleplography, it is important to keep in mind that rectangles, squares and diamond (number one of the diamond) are all rectangles, which have all the properties of paraleograms. The significant differentiation attribute deals with four sides and four angles. The rectangle is a four-rectangular paraleparogram with two matching sides. The diamond, sometimes called diamonds, is a paraleplography with four matching sides. And the square is from a paralenesura with four right angles and four matching sides. But there's more! Let's take a peek at all their qualities. Well, you're well aware of the various special paralemagrams. The crucial question may arise for the brilliant brain as to on what basis these rectangles can be identified & how are classified under such a hierarchy? Surely they have something in common or relatable that would follow them in such a hierarchical order. All right, heads up. The next step is to automatically find the answers as soon as you finish all the properties. First, let's discuss the leader of the hierarchy, the Paraleplatomi grapher. Introduction of Parallelogram, as the name suggests, should bear something parallel. So paraleplography is a rectangle parallel to opposite sides, so the opposite angles are equal. Parallelogram Property 1 Properties: Opposite pages have the same length. i.e. PQ = SR and QR = PS. Property 2: Opposite angles are equal, i.e. ∠P =∠R and ∠Q = ∠S.Property 3: Diagonals slice each other in half (at their intersection), i.e. PO = RO and QO = SOProperty 4: Additional consecutive anglesNow, let's move forward in the next row of hierarchies, i.e. rectangles. (image will be uploaded soon) About RectangleA rectangle is a 2D parallelogram in geometry with the same angles. So this suggests that a rectangle has a relationship with all the properties of the paraleogram, and more, all angles of which are equal. Properties of a rectangleHere, PQ = RS and QR = PSAnd ∠P =∠Q= ∠R = ∠S (All angles are equal)1 ∠ ∠ ∠ ∠. Property 2: The angles opposite each other in the rectangle are equal, i.e. ∠P =∠R = ∠Q= ∠S= 90°. Property 3: The diagonals of the rectangle are intertangular, i.e. PR = QSProperty 4: The diagonals intersect (at their intersection). Property 5: Additional successive anglesKn knowing everything about the properties of a rectangle, make a parallelogram, let's go to the next heir. (image will be uploaded soon) Introduction to Rhombus: Also known as an equitangular rectangle, this parallelogram is equal in length on all four sides. In real life, you can easily spot an object shaped like Rhombus. It can be found, such as a dragon, diamond-shaped earrings, 3D wall stickers, windows of a car, and even mirrors. Do you even know what the name of the 3D diamond is? His name is Rhombohedron from a geometric point of view. So, as he says, the diamond is also a paraleplography, which means that he also inherited all the properties of the parallelogram, and it is having all sides equal to other than that. Property 1: All four sides are equal, i.e. PQ = QR = RS = PSProperty 2: Opposite angles are equal. Property 3: Diagonals cut each other in half & perpendiculars i.e. PO = RO and QO = SO and ∠POQ =∠QOR = ∠ROS = ∠SOP = 90°. Property 4: Diagonals are not amaternating & two-cut peaksNow, the last left of the square. (image will be uploaded soon) Introduction to square: A rectangle or a regular rectangle whose sides are of equal length and width a square. Seeing that the square is the topmost in the hierarchy, so it had to include all the properties of paraleplography, rectangle and diamond. Therefore, to know the properties of a square just add up all the attributes you have learned so far in this lesson. Property 1: All four sides are equal, i.e. PQ = QR = RS = PS. Property 2: All four right angles, i.e. ∠P =∠Q= ∠R = ∠S= 90°. Property 3: Diagonals cut each other in half & perpendicularProperty 4: Diagonals are all consistent & two-cut peaksProperty 5: Additional consecutive anglesUnsolved Example: Prove, that the diagonals of a rectangle are equal in length toPQRS with a rectangle pr and qs as diagonalAs the PQRS is a rectangle, ∠P = 90° QR=PSQR ∥ PS and PQ is a transversalWhy ∠P + ∠Q = 180°∠ ∠Q = 90°In (triangle) Δ PQS and Δ QPRPQ = QP∠P =∠QQR = PSΔ PQS = Δ QPR (according to the law of lateral post-postness) PR = QS (corresponding parts of the congruent triangle)Therefore, it proves that the diagonals of the rectangle are in common. (image will be uploaded soon) Fun FactsThe 1000-page form of geometry is called a chiliagon (a polygon 1000 sides)The flat surfaces of many 3D geometric data or objects are formed in 2D shapesAll lozenge of a dragon, and whichever quadrangle is both kite and parallelogram of a diamond in Rhombohedron is a special case of diamond, where all edges are equal in length. There are still a few questions that students have when working on this task. Let the responses unblock by scrolling down. Down.