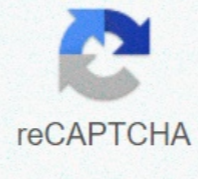I'm not robot

reCAPTCHA

Continue

I'm not robot

reCAPTCHA

Continue

Parallel lines cut by a transversal math lib worksheet answer key

Problems 1-7 : Find the value of x in the diagram.Problem 1 : Problem 2 : Problem 3 : Problem 4 : Problem 5 : Problem 6 : Problems 7-8 : In given the diagram, lines l1 and l2 are parallel and t is a transversal. Find the value of x.Problem 7 : Problem 8 :In the diagram given below, l1 lines l2 are parallel and t is a transversal. Find the value of x. Problem 9 :In the diagram given below, a lines b are parallel and t is a transversal. Find the value of x. Problem 10 :In the diagram given below, find the value of x. Answers 1. Answer : In the diagram above, (6x + 4)° and (4x + 6)° are complementary. (6x + 4)° + (4x + 6)° = 90°6x + 4 + 4x + 6 = 9010x + 10 = 9010x = 80x = 82. Answer : In the diagram above, (4x + 7)° and (6x + 3)° are complementary. (4x + 7)° + (6x + 3)° = 90°4x + 7 + 6x + 3 = 9010x + 10 = 9010x = 80x = 83. Answer : In the diagram above, (2x + 3)° and (x - 6)° are supplementary angles. (2x + 3)° + (x - 6)° = 180°2x + 3 + x - 6 = 1803x - 3 = 1803x = 183x = 614. Answer : In the diagram above, (5x + 4)°, (x - 2)° and (3x + 7)° are supplementary angles. (5x + 4)° + (x - 2)° + (3x + 7)° = 180°5x + 4 + x -2 + 3x + 7 = 1809x + 9 = 1809x = 171x = 195. Answer : In the diagram above, (3x + 7)° and 100° are vertical angles.(3x + 7)° = 100°3x + 7 = 1003x = 93x = 316. Answer : In the diagram above, (x + 33)° and 98° form a linear pair.(x + 33)° + 98° = 180°x + 33 + 98 = 180x + 131 = 180x = 497. Answer : In the above diagram, (2x + 20)° and (3x - 10)° are corresponding angles. When two parallel lines are cut by a transversal, corresponding angles are congruent. (2x + 20)° = (3x - 10)°2x + 20 = 3x - 1030 = x8. Answer : In the above diagram, (2x + 10)° and (x + 5)° are consecutive interior angles. When two parallel lines are cut by a transversal, consecutive interior angles are supplementary. (2x + 10)° + (x + 5)° = 180°2x + 10 + x + 5 = 1803x + 15 = 1803x = 165x = 559. Answer : In the diagram diagram, (2x + 26)° and (3x - 33)° are alternate interior angles. When two parallel lines are cut by a transversal, alternate interior angles are congruent.(2x + 26)° = (3x - 33)°2x + 26 = 3x - 3359 = x10. Answer : In the diagram diagram, it is clear that AB||CD and AD||BC.So ABCD is a parallelogram. In a parallelogram, two consecutive angles are always supplementary. x° + (2x)° = 180°x + 2x = 1803x = 180x = 60 Kindly mail your feedback to v4formath@gmail.comWe always appreciate your feedback.

Two fun activities for students to practice solving problems involving parallel lines and transversals. Each activity requires students to know angle relationships such as corresponding, alternate interior, consecutive interior, alternate exterior, vertical, and linear pairs. 1) Riddle Worksheet - Students solve problems to reveal the answer to the riddle at the top of the page, which means they receive immediate feedback as to whether or not they have solved correctly. 2) Maze - As students fin Proving Theorems About Angles in Parallel Lines Cut by a Transversal Adapted from Walch EducationParallel Lines cut by a Transversal A transversal is a line that intersects a system of two or more lines. Lines l and m are parallel. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a Transversal1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalPractice In the diagram, and . If , , and , find the measures of the unknown angles and the values of x and y.

1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 1 Find the relationship between two angles that have the same variable. $\angle 1$ and $\angle 2$ are same-side interior angles and are both expressed in terms of x. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 2 Use the Same-Side Interior Angles Theorem. Same-side interior angles are supplementary. Therefore, $m\angle 1 + m\angle 2 = 180$. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 3 Use substitution and solve for x. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 4 Find $m\angle 1$ and $m\angle 2$ using substitution. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalAfter finding $m\angle 1$, to find $m\angle 2$you could alternately use the Same-Side Interior Angles Theorem, which says that same-side interior angles are supplementary. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 5 Find the relationship between one of the known angles and the last unknown angle, $\angle 3$. $\angle 1$ and $\angle 3$ lie on the opposite side of the transversal on the interior of the parallel lines. This means they are alternate interior angles. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 6 Use the Alternate Interior Angles Theorem. The Alternate Interior Angles Theorem states that alternate interior angles are congruent if the transversal intersects a set of parallel lines. Therefore, 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 7 Use the definition of congruence and substitution to find $\angle 3$. , so Using substitution, $93 = m\angle 3$. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalStep 8 Use substitution to solve for y. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalSee if you can solve this one. In the diagram, . If $m\angle 1 = 35$ and $m\angle 2 = 65$, find $m\angle EQF$. 1.8.2: Proving Theorems About Angles in Parallel Lines Cut by a TransversalMs. Dambreville Thanks for watching! Parallel Lines Cut By A Transversal Math Lib - Displaying top 8 worksheets found for this concept.Some of the worksheets for this concept are Work section 3 2 angles and parallel lines, 3 parallel lines and transversals, Parallel lines and transversals date period, Parallel lines transversals work, Parallel lines transversals, Parallel lines cut by a transversal 2 1 3 4 6 5 7 8, Do not edit changes must be made through file info name, Parallel lines cut by a transversal.Found worksheet you are looking for?

To download/print, click on pop-out icon or print icon to worksheet to print or download. Worksheet will open in a new window. You can & download or print using the browser document reader options.