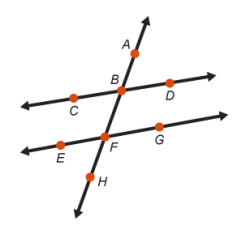
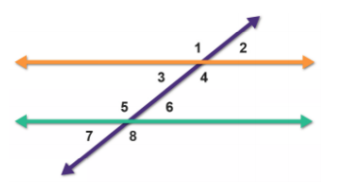
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

Unit 3 Test Review

1. Nicole constructed two lines cut by a transversal. She wants to verify that and are parallel. Which statement would prove that and are parallel?
   1. and are supplementary.
   2. and are congruent.
   3. and are congruent.
   4. and are congruent.

Use the diagram below to answer questions 2 & 3.

1. The diagram shows two parallel lines cut by a transversal. Fill in the blanks to complete the statements.

In the diagram, there are two parallel lines intersected by a transversal.

* Angles 3 and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are consecutive interior angles.
* Because is a corresponding angle to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and because forms a linear pair with we know \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. The diagram shows two parallel lines cut by a transversal. Fill in the blanks to complete the statements below.

* In the diagram, and are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interior angles.
* Because angle 6 is a corresponding angle with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,
* You can use the transitive property to show that and are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

1. Given Line S II R. Pick a theorem and prove it.

2

1

4

3

5

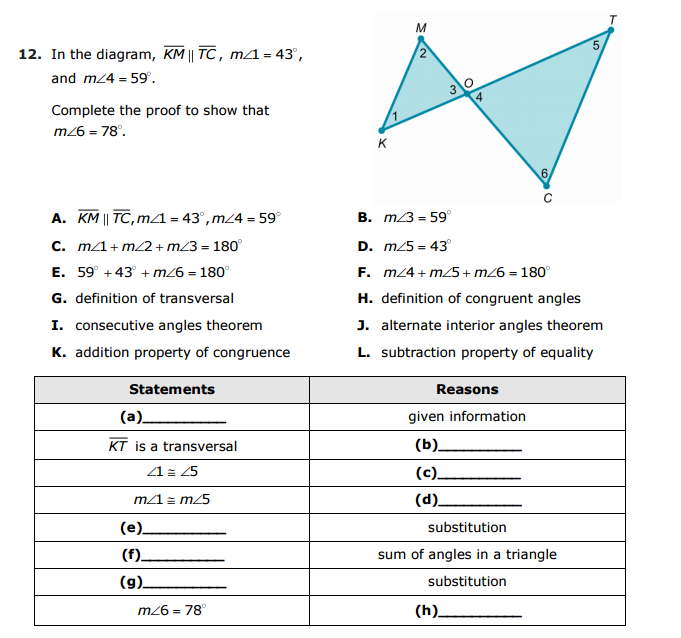
6

7

8

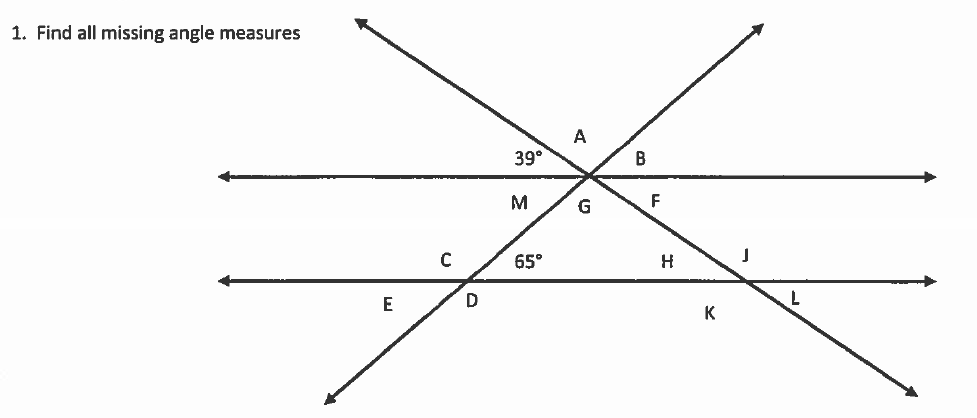
S

R



consecutive interior angles theorem

1. Find all missing angle measures

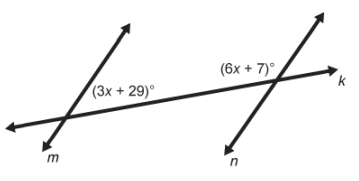


42°

61°

1. The figure in the diagram contains lines and and transversal line .

Given solve for x and justify your reasoning in a two-column proof.



1. What information would be enough to prove two lines are perpendicular to each other? (3)



1. What information would be enough to prove two lines are parallel? (4)

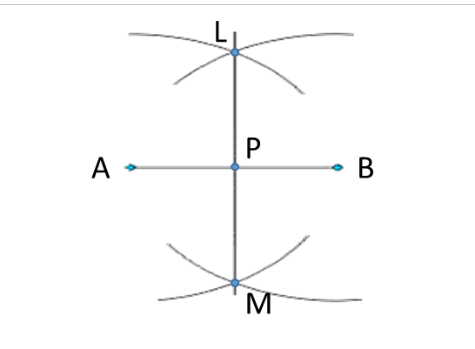


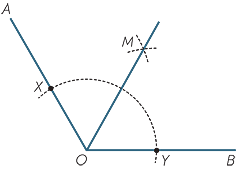
For the following, write the name of the construction then solve for .

1. Construction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11. Construction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Given:





1. Complete the chart using the following diagram.

1

4

2

3

8

5

7

6

S

R

|  |  |  |  |
| --- | --- | --- | --- |
| Angle Type | Example | Congruent or Supplementary | Does it have a converse? |
| Vertical Angles |  |  |  |
| Linear Pair |  |  |  |
| Alternate Interior |  |  |  |
| Consecutive Interior |  |  |  |
| Alternate Exterior |  |  |  |
| Corresponding |  |  |  |