



Roots of Reason

Lines and Angles Check

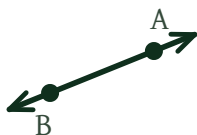
Name _____ Date _____ Correct _____ / 21

1 Write what each one is. Choose from: point, line, line segment, ray, parallel lines, perpendicular lines.

P



1.



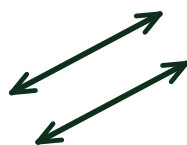
2.



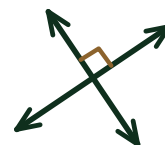
3.



4.

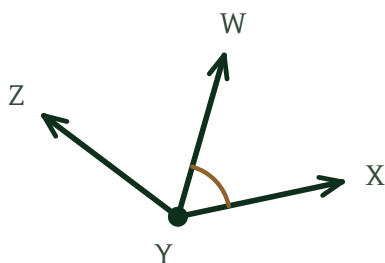


5.



6.

2 Name the angles at Y. Use three letters, with the vertex letter in the middle.



7. the angle between ray YX and ray YW

8. the angle between ray YW and ray YZ

9. the widest angle at Y

10. One of these three names the widest angle at Y. Mark it.

angle YXZ

angle XYZ

angle ZXY

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3 Sort the six angles. *Label each one right, acute, obtuse or straight.*



11. (a)



12. (b)



13. (c)



14. (d)



15. (e)

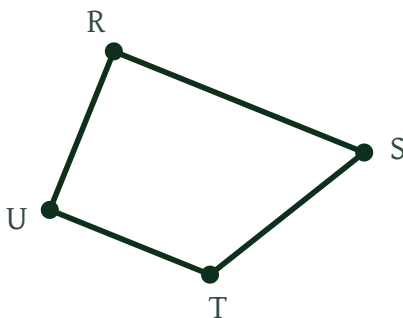


16. (f)

17. Two pairs among the six are equal to each other. Write both pairs.

_____ and _____ and _____

4 Find them inside the figure. *The shape is turned. Turning it does not change its sides or angles.*



18. a pair of sides that are parallel

19. a pair of sides that are perpendicular

20. the name of the one obtuse corner

21. A classmate says T is a right angle because it is a corner of the shape. Say how you could check.



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Write what each one is

1. *point* 2. *line* 3. *line segment* 4. *ray* 5. *parallel lines* 6. *perpendicular lines*

Both pairs sit at a slant. Item 6 crosses at a right angle and item 5 never crosses at all, which is the only thing separating them.

Name the angles at Y

7. *angle XYW* 8. *angle WYZ* 9. *angle XYZ*. Reverse the outer letters if you like. Y stays in the middle.

10. *angle XYZ*. The other two put X in the middle, so they name a corner at X, and there is no corner at X.

Sort the six angles

11. *right* 12. *acute* 13. *obtuse* 14. *acute* 15. *straight* 16. *right*

17. *a and f*, both right angles. *b and d*, both 35 degrees. In each pair one is drawn with rays nearly twice as long.

Find them inside the figure

18. *RS and TU* 19. *UR and RS*, or UR and TU 20. *angle STU*, 119.6 degrees

21. Fold a corner of paper and lay it into T, or slide the tester round from R. T opens wider than the tester, so it is not right. Being a corner of the shape does not make it a right angle.

Mark 11 and 16 together. A student who calls a turned right angle acute or obtuse is reading the page, not the angle, and 17 will show the same habit from the other side.