Points, Lines, Rays, and Angles

Name: _____ Date: _____ Score: _____ / 24

Quick Review

Geometry starts with a few simple building blocks. A **point** is just an exact spot — it has no size at all. A **line** is perfectly straight and goes on forever in *both* directions. A **ray** starts at one endpoint and goes on forever in only *one* direction, like a beam from a flashlight. A **line segment** is a straight path with *two* endpoints, so it has a definite length. When two rays share the same endpoint, they form an **angle**. A **right angle** measures exactly $90°$ and makes a square corner. An **acute angle** is smaller than $90°$, and an **obtuse angle** is larger than $90°$ but less than $180°$.

◇ **Example:** A figure is perfectly straight, has two endpoints, and has a definite length you could measure with a ruler. What is it?

⇒ Let's check the clues one at a time. It is straight, so it is one of our geometry pieces. The big clue is *two endpoints* — a line has no endpoints and a ray has only one, but a line segment has exactly two. Having two endpoints is also why it has a length you can measure. So this figure must be a line segment.

Answer: line segment

PRACTICE

Name the geometric term or classify the angle described in each problem.

1. An exact spot with no size _____
2. A straight path that goes on forever in both directions _____
3. A straight path with two endpoints _____
4. A straight path with one endpoint that goes on forever one way _____
5. Two rays that share the same endpoint _____
6. An angle that measures exactly $90°$ _____
7. An angle that measures $45°$ _____
8. An angle that measures $130°$ _____
9. An angle that measures $20°$ _____
10. An angle that measures $95°$ _____
11. The corner of a sheet of paper is which kind of angle? _____
12. An angle that measures $89°$ _____
13. An angle that measures $90°$ _____
14. An angle that measures $179°$ _____
15. A beam of light from a flashlight is most like a . . . _____
16. An angle that measures $1°$ _____
17. An L-shaped corner forms an angle that is which kind? _____
18. An angle that measures $150°$ _____
19. The shape of a ruler's edge with two marked ends _____
20. An angle that measures $60°$ _____

Word Problems

21. Maria is looking at the hands of a clock at $3{:}00$. The two hands meet at the center and form an angle of $90°$. What kind of angle do the clock hands make? _____
22. Jayden draws a straight path on his paper and puts a clear dot at each end so everyone knows where it stops. What geometric figure did Jayden draw? _____
23. During art class, Priya tilts her ramp so the angle between the ramp and the floor opens to $35°$. Is that angle acute, right, or obtuse? _____
24. A lighthouse sends a beam of light that starts at the lamp and travels straight out across the ocean as far as it can go. Which geometric figure best matches that beam of light? _____

Scan Me

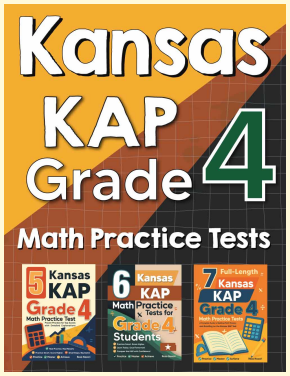
Answer Keys

1. point
2. line
3. line segment
4. ray
5. angle
6. right angle
7. acute angle
8. obtuse angle
9. acute angle
10. obtuse angle
11. right angle
12. acute angle
13. right angle
14. obtuse angle
15. ray
16. acute angle
17. right angle
18. obtuse angle
19. line segment
20. acute angle
21. a right angle
22. a line segment
23. acute
24. a ray

Step-by-Step Explanations

1. A point just marks one exact location — it has no length or width at all.
2. A line never ends — it keeps going forever in both directions.
3. Two endpoints means it is a line segment, so it has a length you can measure.
4. One endpoint and one forever-direction — that is a ray, like a flashlight beam.
5. When two rays meet at a shared endpoint, they form an angle.
6. Exactly 90° makes a perfect square corner, so it is a right angle.
7. Since 45° is less than 90°, this is an acute angle.
8. Since 130° is between 90° and 180°, it is an obtuse angle.
9. 20° is much smaller than 90°, so the angle is acute.
10. 95° is just past 90°, so it counts as an obtuse angle.
11. A paper corner is a perfect square corner, which is a right angle of 90°.
12. 89° is just under 90°, so the angle is acute.
13. Any angle measuring exactly 90° is a right angle.
14. 179° is less than 180° but more than 90°, so it is obtuse.
15. It starts at the flashlight and shines on forever one way — that is a ray.
16. 1° is a tiny angle, far below 90°, so it is acute.
17. An L-shape makes a square corner of 90°, which is a right angle.
18. 150° falls between 90° and 180°, so it is obtuse.
19. Two marked ends means two endpoints, so the edge is a line segment.
20. 60° is less than 90°, so the angle is acute.
21. An angle of exactly 90° is a right angle. At $3{:}00$ the hands make a perfect square corner.
22. A straight path with two endpoints is a line segment. The two dots are the endpoints.
23. Since 35° is less than 90°, the angle is acute — it is a small, narrow opening.
24. The beam has one starting endpoint at the lamp and goes on forever in a single direction, which is exactly what a ray is.

Want Even More Practice? Check Out Our Other Kansas KAP Test Books!



Kansas KAP Grade 4 Math Preparation Bundle

18 full-length practice tests across three books (5 + 6 + 7)

No repeated questions—maximum practice value!

18 Tests!
3 Books
One Bundle

Important: All our test books contain **unique, completely different tests** from each other! Each book offers fresh practice questions—no repeats!

5 Practice Tests

- ✓ 5 complete practice tests with detailed explanations
- ✓ Perfect foundation for KAP test preparation
- ✓ Builds confidence and test-taking skills
- ✓ High-quality questions aligned with state standards

Start your practice journey!

6 Practice Tests

- ✓ 6 complete practice tests with detailed explanations
- ✓ **Unique tests**—different from the 5 tests book
- ✓ Perfect for more practice after mastering 5 tests
- ✓ Builds even more confidence and test-taking skills
- ✓ Same high-quality questions aligned with standards

Take your practice to the next level!

7 Practice Tests

- ✓ 7 complete practice tests for maximum preparation
- ✓ **Unique tests**—different from 5 and 6 tests books
- ✓ The most comprehensive practice for Grade 4
- ✓ Ideal for students aiming for top scores
- ✓ Extensive practice builds mastery and confidence

Go all the way with comprehensive practice!