LESSON MAKER PRO

Line Detectives

Spot line relationships in shapes and real places.

GRADE 4 · 4.MG.4.d

4.MG.4.d "Identify parallel, perpendicular, and intersecting lines and line segments in plane and solid figures, including those in context."

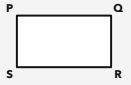
NAME _____ DATE _____

LINE CLUES

Parallel lines stay the same distance apart and never meet. Perpendicular segments meet to make a square corner. Intersecting lines cross, but they may not make a square corner.

WORKED EXAMPLE

Look at rectangle PQRS. How are segments PQ and QR related?



1. PQ and QR meet at Q.
2. They make a square corner.
3. Segments PQ and QR are perpendicular.

Answer: perpendicular

PRACTICE 4 problems

1 What do you call lines that stay the same distance apart and never meet?

ANSWER _____

2 What do you call segments that meet to make a square corner?

ANSWER _____

3 What do you call lines that cross but do not make a square corner?

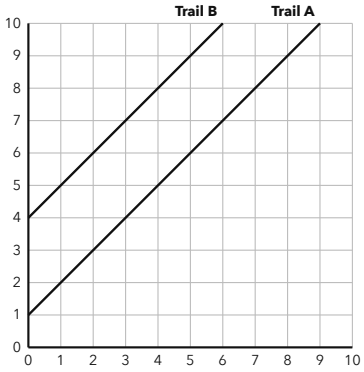
ANSWER _____

4 Line m and line n cross at one point. They do not make a square corner. How are they related?

ANSWER _____

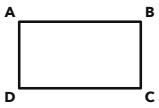
APPLY IT Show your work

1 Two straight skate park trails are shown. How are Trail A and Trail B related?



ANSWER _____

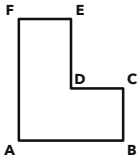
2 Ava's photo frame is shown. How are segments AB and BC related?



ANSWER _____

CHALLENGE One step up

Look at the L-shaped garden border. Classify each pair: AB and EF, BC and CD, DE and FA.



WORK SPACE AND ANSWER

ANSWER KEY

Line Detectives

GRADE 4 · 4.MG.4.d

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What do you call lines that stay the same distance apart and never meet?	**parallel**
2	What do you call segments that meet to make a square corner?	**perpendicular**
3	What do you call lines that cross but do not make a square corner?	**intersecting**
4	Line m and line n cross at one point. They do not make a square corner. How are they related?	**intersecting**

PART 2 · APPLY IT

1. **parallel** The two trails have the same direction and stay the same distance apart. They are parallel.
2. **perpendicular** AB and BC meet at a square corner at B. They are perpendicular.

CHALLENGE

AB and EF are parallel. BC and CD are perpendicular. DE and FA are parallel.

Accept the words parallel, perpendicular, and intersecting in any capitalization. For the challenge, accept the three classifications in the listed order.