



TIMO practice: Counting line segments (with solutions)

12 problems · Grade 1, 2, 3 · answers and solutions at the end

Name _____

Date _____



Practise this type in the Karotto app, with questions read aloud and hints when stuck. Scan the code or visit playkarotto.com

Grade 1

- 1 The picture has 5 points on one straight line. How many line segments are there in all?



Answer: _____

- 2 The picture has 3 points on one straight line. How many line segments are there in all?



Answer: _____

- 3 The picture has 4 points on one straight line. How many line segments are there in all?



Answer: _____

- 4 The picture has 5 points on one straight line. How many line segments are there in all?



Answer: _____

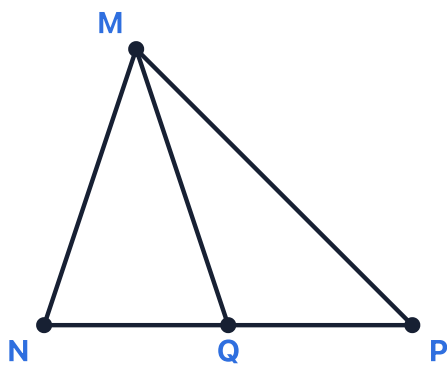
Grade 2

- 5 The picture has 4 points, and no three of them are on the same straight line. What is the most straight lines you can draw, each going through two points?



Answer: _____

- 6 How many line segments are there in the picture in all?



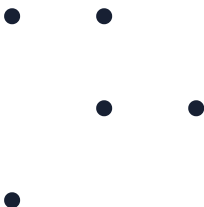
Answer: _____

- 7 The picture has 6 points on one straight line. How many line segments are there in all?



Answer: _____

- 8 The picture has 5 points, and no three of them are on the same straight line. What is the most straight lines you can draw, each going through two points?



Answer: _____

Grade 3

- 9 The picture has 6 points on one straight line. How many line segments are there in all?



Answer: _____

- 10 How many line segments are there in the picture in all?



Answer: _____

- 11 The picture has 4 points, and no three of them are on the same straight line. What is the most straight lines you can draw, each going through two points?



Answer: _____

- 12 The picture has 4 points on one straight line. How many line segments are there in all?



Answer: _____

Answers and solutions: Counting line segments

1. Answer: 10 · Grade 1

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 4 plus 3 plus 2 plus 1 equals 10 segments.

2. Answer: 3 · Grade 1

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 2 plus 1 equals 3 segments.

3. Answer: 6 · Grade 1

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 3 plus 2 plus 1 equals 6 segments.

4. Answer: 10 · Grade 1

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 4 plus 3 plus 2 plus 1 equals 10 segments.

5. Answer: 6 · Grade 2

How to think: Each straight line goes through exactly two points. Start at one point and draw lines to the other points.

Solution: Each point adds its new lines: 3 plus 2 plus 1 equals 6 straight lines. Just like the handshake problem!

6. Answer: 6 · Grade 2

How to think: Make two groups: the segments going out from the top corner, and the segments lying on the bottom side.

Solution: From the top corner there are 3 segments. On the bottom side there are 2 plus 1 equals 3 segments. In all: 3 plus 3 equals 6 segments.

7. Answer: 15 · Grade 2

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 5 plus 4 plus 3 plus 2 plus 1 equals 15 segments.

8. Answer: 10 · Grade 2

How to think: Each straight line goes through exactly two points. Start at one point and draw lines to the other points.

Solution: Each point adds its new lines: 4 plus 3 plus 2 plus 1 equals 10 straight lines. Just like the handshake problem!

9. Answer: 15 · Grade 3

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 5 plus 4 plus 3 plus 2 plus 1 equals 15 segments.

10. Answer: 10 · Grade 3

How to think: Make two groups: the segments going out from the top corner, and the segments lying on the bottom side.

Solution: From the top corner there are 4 segments. On the bottom side there are 3 plus 2 plus 1 equals 6 segments. In all: 4 plus 6 equals 10 segments.

11. Answer: 6 · Grade 3

How to think: Each straight line goes through exactly two points. Start at one point and draw lines to the other points.

Solution: Each point adds its new lines: 3 plus 2 plus 1 equals 6 straight lines. Just like the handshake problem!

12. Answer: 6 · Grade 3

How to think: Count in order: the segments starting at the first point, then the ones starting at the second point, and so on.

Solution: Count the segments starting at each point: 3 plus 2 plus 1 equals 6 segments.
