Parallel and perpendicular lines. Quadrilaterals. Angles.

school 6



## WARM UP

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Lesson 10 Parallel and perpendicular lines. Quadrilaterals. Angles. New Material I Making a Right Angle Template. 4 Fold a sheet of paper in half and then in half again. Using a ruler trace the creases with a pencil. How many straight lines did you get? How many angles do these lines form? 90° Note the special symbol in the angle. If we see this box, it is a right angle. The 90° is rarely written in. All the angles below are right angles. Use your right angle template to check it. Find examples of right angles in your room. 5 С 6 a) Write a name of the rectangle \_\_\_\_\_ Using a ruler measure sides CF and QR \_\_\_\_\_ Using a ruler measure sides CQ and FR \_\_\_\_\_ What did you notice? 0 R N M b) Write a name of the square \_\_\_\_\_ Using a ruler measure sides CF and QR \_\_\_\_\_ Using a ruler measure sides CQ and FR \_\_\_\_\_ What did you notice? S Т



# Lesson 10 Parallel and perpendicular lines. Quadrilaterals. Angles. Quadrilateral is divided in squares. Find a perimeter of a quadrilateral if one side of the shaded 8 square is 8 cm. P = \_\_\_\_\_ Connect exactly four points on the pictures below to make 9 a) a rectangle b) a square REVIEW Compare if possible, using >, <, or =. Cross out everything what cannot be compared. Explain. 10 $23 kg \square 5 kg$ 68 cm 🛛 86 cm $3 dm \square 16 cm$ 181 🗆 371 51 dm $\Box$ 57 dm $7 m \square 8 kg$ Compare expressions using >, <, or =: 11 $a \square a + c$ $a + b \square b + a$ $38-b \Box 68-b$ $k + 26 \Box 62 + k \qquad a - 0 \Box a + 0$ $b \square b-5$ $54 + n \square 54 - n \qquad c - 19 \square c - 90$ 4 $\square$ d-dCheck if the equality 12 - 8 = 3 + 1 still holds if 12 a) We add 7 to the left part and 4 to the right part \_\_\_\_\_ b) We add 10 to both parts \_\_\_\_\_ c) We add 5 to the right part

### Lesson 10 **Parallel and perpendicular lines. Quadrilaterals. Angles.**

#### Check if equality 15 - 4 = 5 + 6 still holds if

- a) We subtract 5 from the right side \_\_\_\_\_
- b) We subtract 6 from both sides \_\_\_\_\_
- c) We subtract 1 from the left side and add 1 to the right side \_\_\_\_\_

#### Write down the following expressions:

13

14

The sum of *m* and *n* \_\_\_\_\_

The difference between 34 and x \_\_\_\_\_

The difference between 200 and 48\_\_\_\_\_

## Challenge yourself

There are apples on three plates: 1 apple on the  $1^{st}$  plate, 3 apples on the  $2^{nd}$  plate, and 8 apples on the  $3^{rd}$  plate. Move apples from plate to plate to make the number of apples on each plate the same. Follow the rules:

- In one move, you can take any number of apples from one plate and move them to the other plate.
- The number of apples you can add to any plate should be equal to the number of apples that are already there. In other words, you can only double the number of apples that are already on the receiving plate.
- The total number of moves is unlimited.







