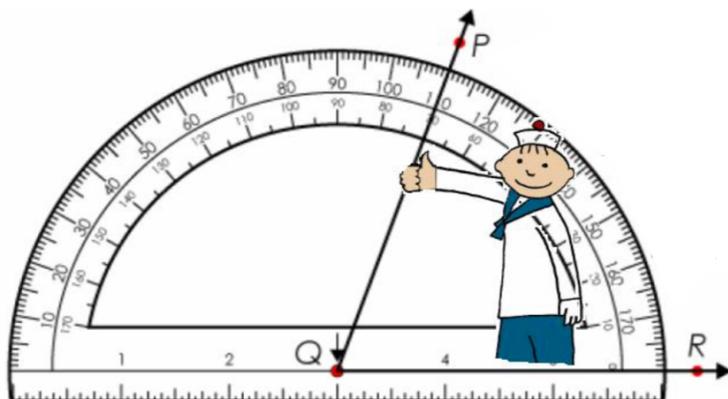


Math 4b. Classwork



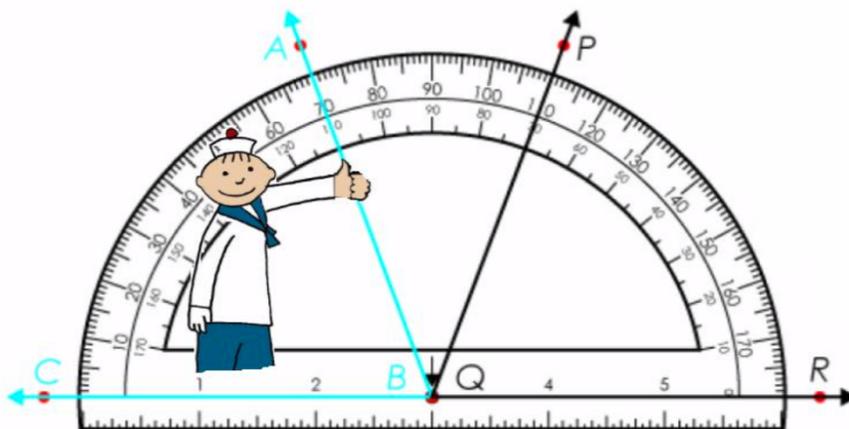
A protractor is used to measure angles. Note how it has the shape of half a circle; therefore it only measures angles up to 180. It has two sets of numbers: one set goes from 0 to 180 one way, one set from 0 to 180 the other way. Which one you read depends on where you place the one side of the angle you are measuring.



The protractor's arrow and pen hole is placed on the angle's vertex. The 0° line is placed over one side of the angle. Read the measure where the other leg of the angle intersects the protractor.

$\angle PQR$ measures 70°

If the 0° line is used on the left of the pen hole, use the outside edge for the measure. If the 0° line is used on the right of the pen hole, use the inside edge. Read the measure where the other leg of the angle intersects the protractor.



$\angle ABC$ and $\angle PQR$ both measure 70° .

Homework.

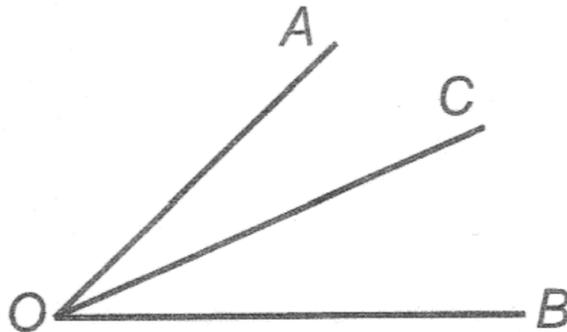
1.

Finish the expression by substituting the words “greater” and “smaller” appropriately.

- a) Acute angle is always _____ than right angle.
- b) Obtuse angle is always _____ than right angle.
- c) Acute angle is always _____ than obtuse angle
- d) Right angle is always _____ than acute angle
- e) Obtuse angle is always _____ than acute angle.

2.

The vertices of the angles on the picture below share the point. How many angles can you find? Write them down.



3. The teacher wrote a few problems with decimals on the board, but Aniket erased all the decimal points. Put the decimal points back into the expressions to make them correct.

$$32 + 18 = 5$$

$$63 - 27 = 603$$

4.

- a. Find the largest and smallest of the following five numbers:

21, -12, 30, -1, 2

- b. Find the largest and smallest of the following numbers:

$-\frac{15}{17}$, -1, $-\frac{3}{119}$, 0.2, 1, 0

5. Solve equations and decipher the name of the longest river in Africa.

E

$$\frac{b}{4} = 80 - 45$$

N

$$200 - x = 36 + 18$$

L

$$a - 8 \cdot 6 = 67$$

I

$$70 \cdot 3 = y + 54$$

| | | | |
|-----|-----|-----|-----|
| 146 | 156 | 115 | 140 |
| | | | |

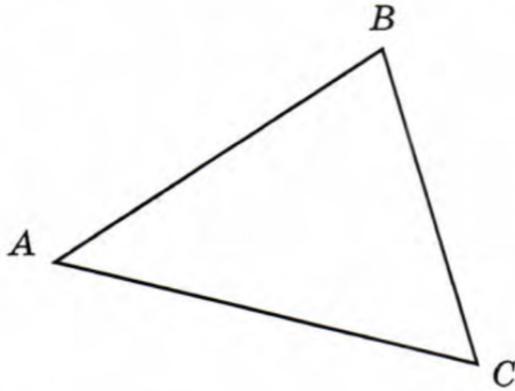
6. Decipher the territory of which country this river flows by arranging the answers in ascending order.

| | |
|---|-----------------------------------|
| G | $\frac{12}{17} - \frac{9}{17} =$ |
| E | $9\frac{2}{17} - 9 =$ |
| T | $1\frac{4}{5} + 2 =$ |
| P | $4\frac{6}{11} - 2\frac{3}{11} =$ |
| Y | $\frac{3}{7} + 1\frac{4}{7} =$ |

| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |

7. Measure the angles of a triangle with a protractor and find their sum

a)



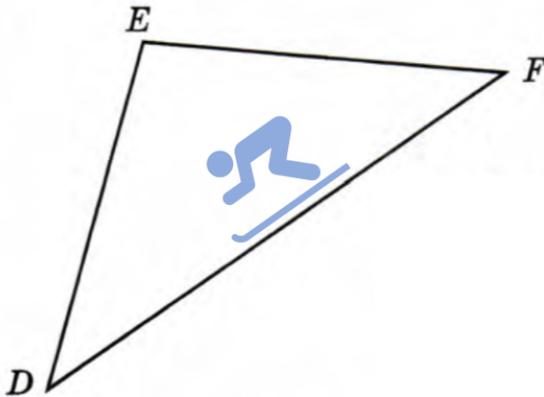
$$\angle A = \underline{\hspace{2cm}}$$

$$\angle B = \underline{\hspace{2cm}}$$

$$\angle C = \underline{\hspace{2cm}}$$

$$\angle A + \angle B + \angle C = \underline{\hspace{2cm}}$$

b)



$$\angle D = \underline{\hspace{2cm}}$$

$$\angle E = \underline{\hspace{2cm}}$$

$$\angle F = \underline{\hspace{2cm}}$$

$$\angle D + \angle E + \angle F = \underline{\hspace{2cm}}$$