



Calculate using the most optimal way:

a)  $13 + 16 + 19 + 22 + 25 + 28 + 31 + 34 + 37 =$  \_\_\_\_\_  
 $=$  \_\_\_\_\_

b) Calculate. Look on the equations and decide where you need to remove parentheses and where you don't:

$14 - (4 - 1) =$  \_\_\_\_\_

$208 - (100 + 8) =$  \_\_\_\_\_

$444 - (44 + 400) =$  \_\_\_\_\_

$444 - (44 + 400) =$  \_\_\_\_\_

$14 - (4 - 1) =$  \_\_\_\_\_

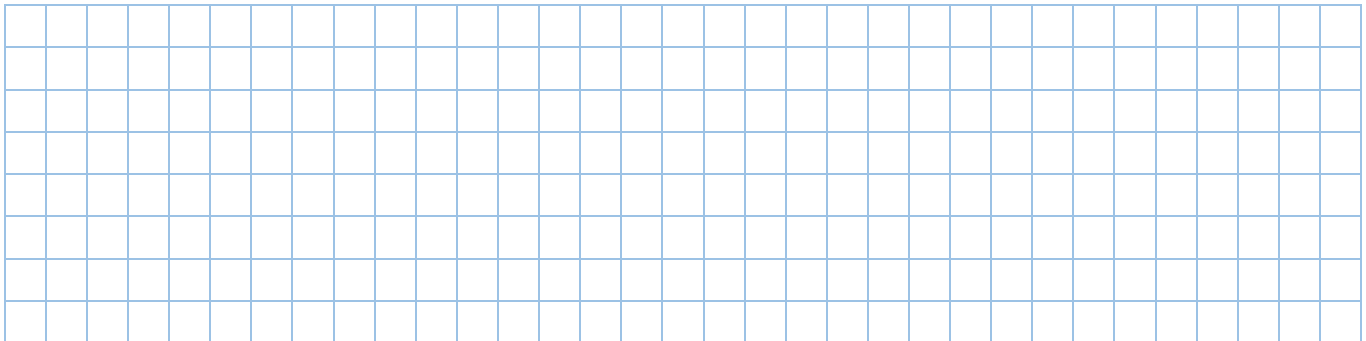
$208 - (100 + 8) =$  \_\_\_\_\_

c) Solve for x and check your answer:

$x + 42 = 418$

$271 - x = 35$

$x - 26 = 345$



d) Calculate:

$3 \text{ dm } 7 \text{ cm} + 4 \text{ dm } 5 \text{ cm} =$  \_\_\_\_\_

$26 \text{ cm} + 3 \text{ dm } 8 \text{ cm} =$  \_\_\_\_\_

$7 \text{ dm } 2 \text{ cm} - 56 \text{ cm} =$  \_\_\_\_\_

$6 \text{ dm } 8 \text{ cm} - 9 \text{ cm} =$  \_\_\_\_\_

Report the time you spent: \_\_\_\_\_ minutes



**1** Rewrite each problem using multiplication instead of addition (where possible!):

**For example:**  $2 + 2 + 2 + 2 = 2 \times 4$

$12 + 12 + 12 + 12 =$  \_\_\_\_\_

$28 + 82 =$  \_\_\_\_\_

$24 + 24 + 24 =$  \_\_\_\_\_

$7 + 7 + 7 + 7 + 7 =$  \_\_\_\_\_

$13 + 27 + 27 =$  \_\_\_\_\_

$9 + 9 + 9 =$  \_\_\_\_\_

**2** Rewrite each problem using addition instead of multiplication. The first one is done for you.

$5 \times 3 = 5 + 5 + 5$

$a \times 4 =$  \_\_\_\_\_

$b \times 2 =$  \_\_\_\_\_

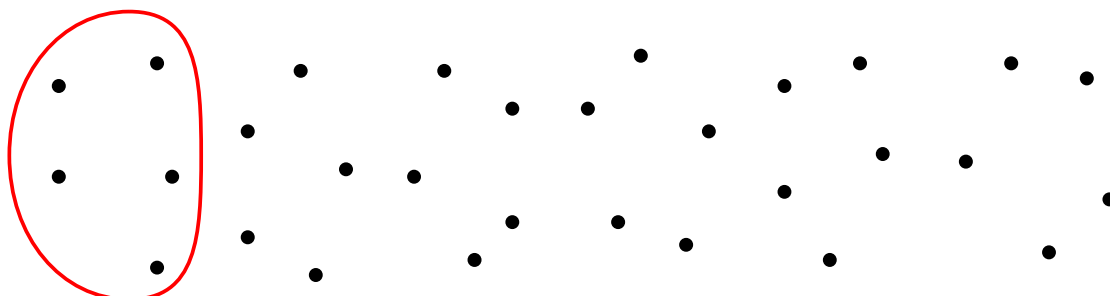
$2 \times 2 =$  \_\_\_\_\_

$n \times 4 =$  \_\_\_\_\_

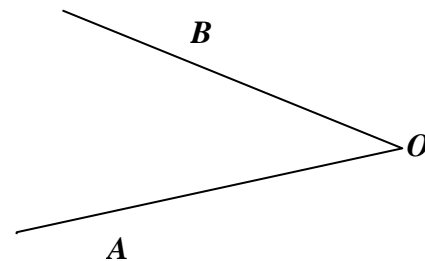
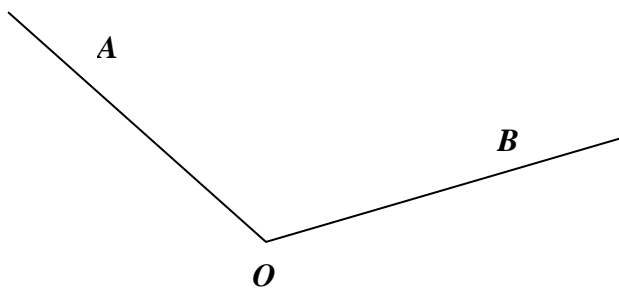
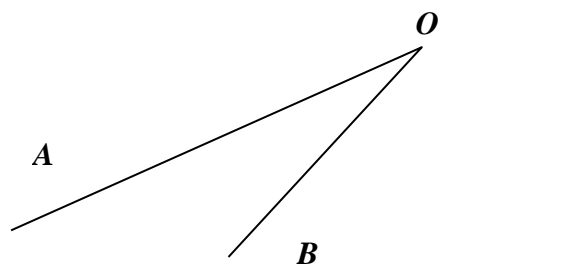
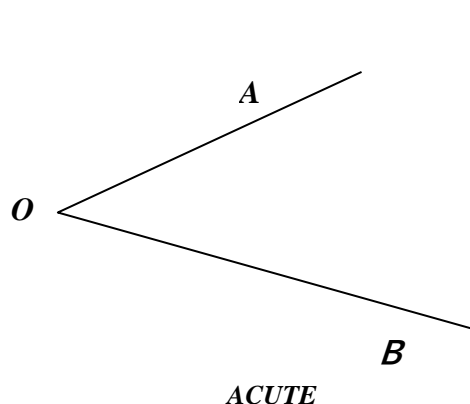
$p \times 3 =$  \_\_\_\_\_

**3** Count the points by grouping them into sets of five:  $5 \times \underline{\quad} = \underline{\quad}$

Count the points by grouping them in the sets of six:  $6 \times \underline{\quad} = \underline{\quad}$

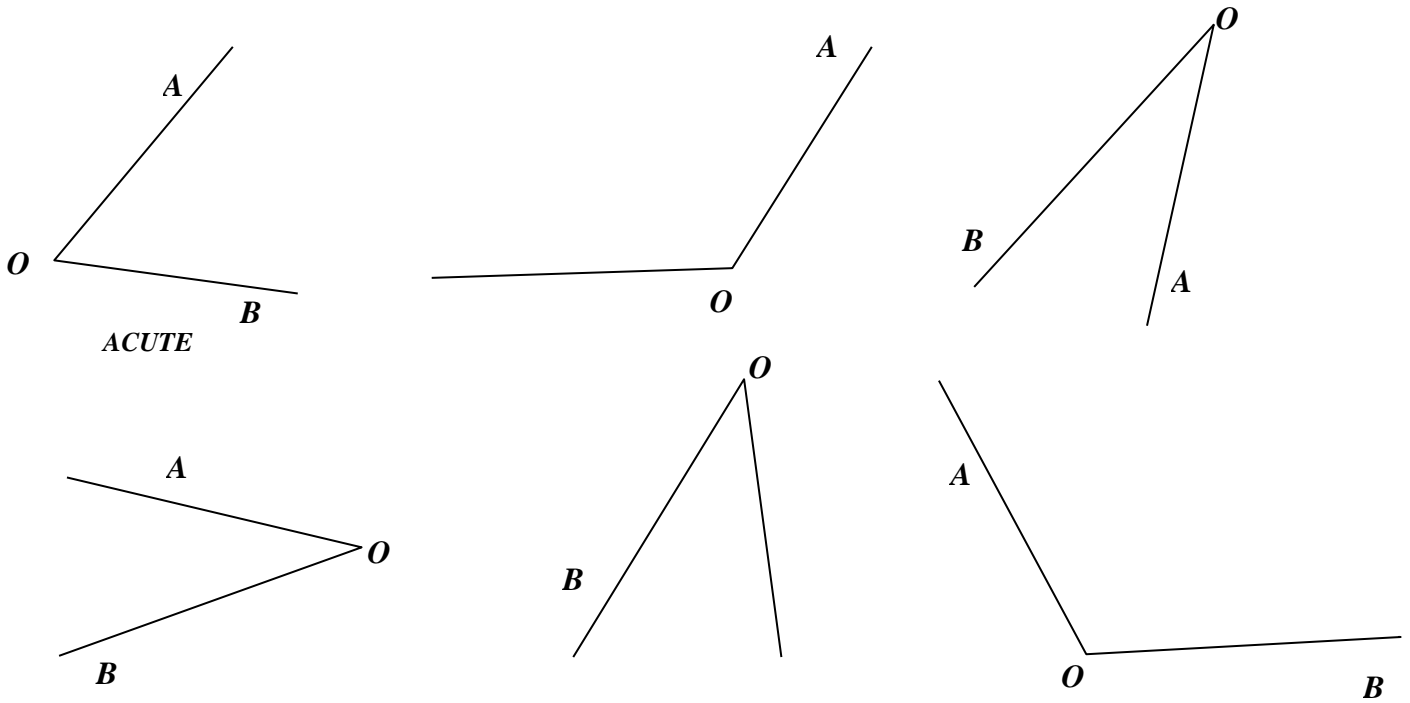


**4** a) Use a ruler to plot ray **OK** so that ray **OB** would be inside the angle  $\angle AOK$  for each angle below:



Use the right angle template. Label the angles as acute, right or obtuse.

b) Use a ruler to plot a ray **OK** so that a ray **OB** would be outside the angle  $\angle AOK$  for each angle below:



Use right angle template. Label the angles as acute, right or obtuse.

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Perform the operations. What do you notice?

+2	+20	+200
284 <input type="text"/>	284 <input type="text"/>	284 <input type="text"/>
285 <input type="text"/>	285 <input type="text"/>	285 <input type="text"/>
286 <input type="text"/>	286 <input type="text"/>	286 <input type="text"/>
287 <input type="text"/>	287 <input type="text"/>	287 <input type="text"/>
-2	-20	-200
284 <input type="text"/>	284 <input type="text"/>	284 <input type="text"/>
285 <input type="text"/>	285 <input type="text"/>	285 <input type="text"/>
286 <input type="text"/>	286 <input type="text"/>	286 <input type="text"/>
287 <input type="text"/>	287 <input type="text"/>	287 <input type="text"/>



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Write expressions corresponding to the word problems:

- a) There were  $p$  coins in the first chest and  $r$  coins in the second. How many coins are in both chests?  
\_\_\_\_\_
- b) There are  $q$  coins in the first chest and  $x$  coins in the second. How many more coins are in the second chest than in the first? \_\_\_\_\_
- c) There are  $n$  coins in the first chest. In the second chest, there are  $k$  coins more than in the first. How many coins are in both chests? \_\_\_\_\_

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Tom was supposed to add together three numbers: 41, 273, and 136. He wrote them in column and added as shown. What did he do wrong? Help him add the numbers correctly.

$$\begin{array}{r}
 41 \\
 + 273 \\
 136 \\
 \hline
 819
 \end{array}$$

$$\begin{array}{r}
 \\
 + \\
 \\
 \\
 \\
 \\
 \hline
 \\
 \end{array}$$

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- a) Write an algorithm for the column addition of two 3-digit numbers. (Remember - to write an algorithm means to create a list of step by step operations one should do to get the correct result. Imagine you teach this to your younger friend). What kind of algorithm is that? (linear or cycling?)

Step 1: Write down the first number

Step 2: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- b) Draw a scheme for loading a dishwasher algorithm - you want to put all dishes from your sink to a dishwasher plate by plate. You begin with opening a dishwasher and then put the 1st plate in. Assume that there are 4 plates in the sink. Check if you have more plates in the sink. What do you do if there are no more plates in the sink? What do you do if there are plates in the sink?