



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:

$$14 - (4 - 1) = \underline{\hspace{2cm}}$$

$$208 - (100 + 8) = \underline{\hspace{2cm}}$$

$$444 - (44 + 400) = \underline{\hspace{2cm}}$$

$$444 - (44 + 400) = \underline{\hspace{2cm}}$$

$$14 - (4 - 1) = \underline{\hspace{2cm}}$$

$$208 - (100 + 8) = \underline{\hspace{2cm}}$$

c) Solve for x and check your answer:

$$x + 42 = 418$$

$$271 - x = 35$$

$$x - 26 = 345$$

[illegible]

d) Calculate:

3 dm 7 cm + 4 dm 5 cm = _____

26 cm + 3 dm 8 cm = _____

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

$$6 \text{ dm } 8 \text{ cm} - 9 \text{ cm} = \underline{\hspace{2cm}}$$



Report the time you spent: _____ minutes

1

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

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

$12 + 12 + 12 + 12 = \underline{\hspace{2cm}}$

$28 + 82 = \underline{\hspace{2cm}}$

$24 + 24 + 24 = \underline{\hspace{2cm}}$

$7 + 7 + 7 + 7 + 7 = \underline{\hspace{2cm}}$

$13 + 27 + 27 = \underline{\hspace{2cm}}$

$9 + 9 + 9 = \underline{\hspace{2cm}}$

2

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

$5 \times 3 = \underline{5 + 5 + 5}$

$a \times 4 = \underline{\hspace{2cm}}$

$b \times 2 = \underline{\hspace{2cm}}$

$2 \times 2 = \underline{\hspace{2cm}}$

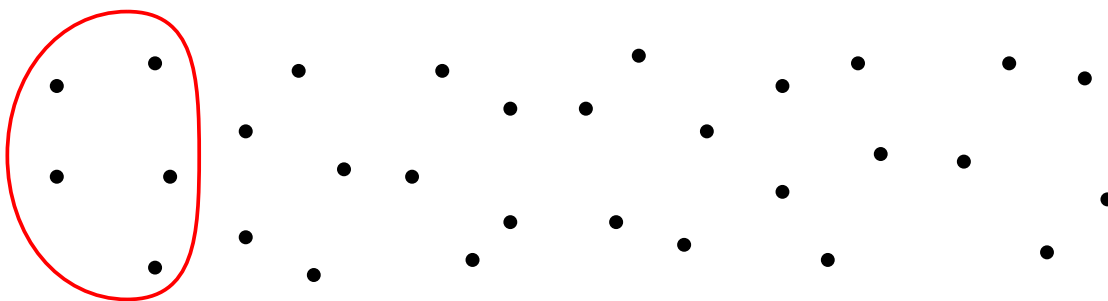
$n \times 4 = \underline{\hspace{2cm}}$

$p \times 3 = \underline{\hspace{2cm}}$

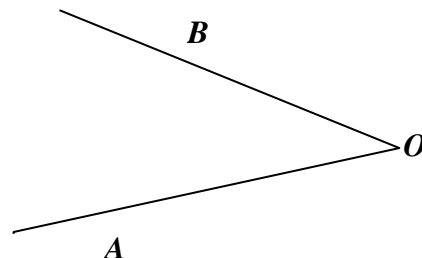
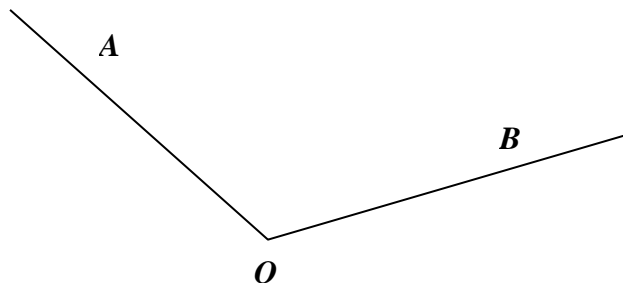
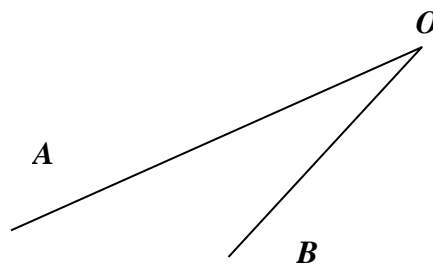
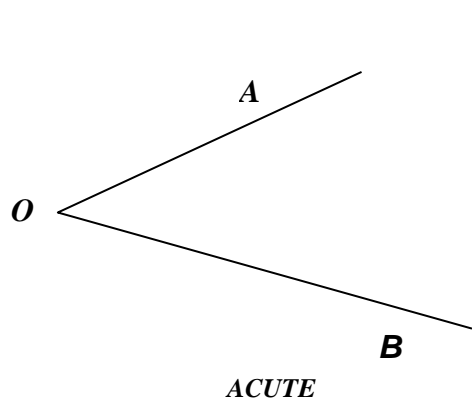
3

Count the points by grouping them into sets of five: $5 \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

Count the points by grouping them in the sets of six: $6 \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

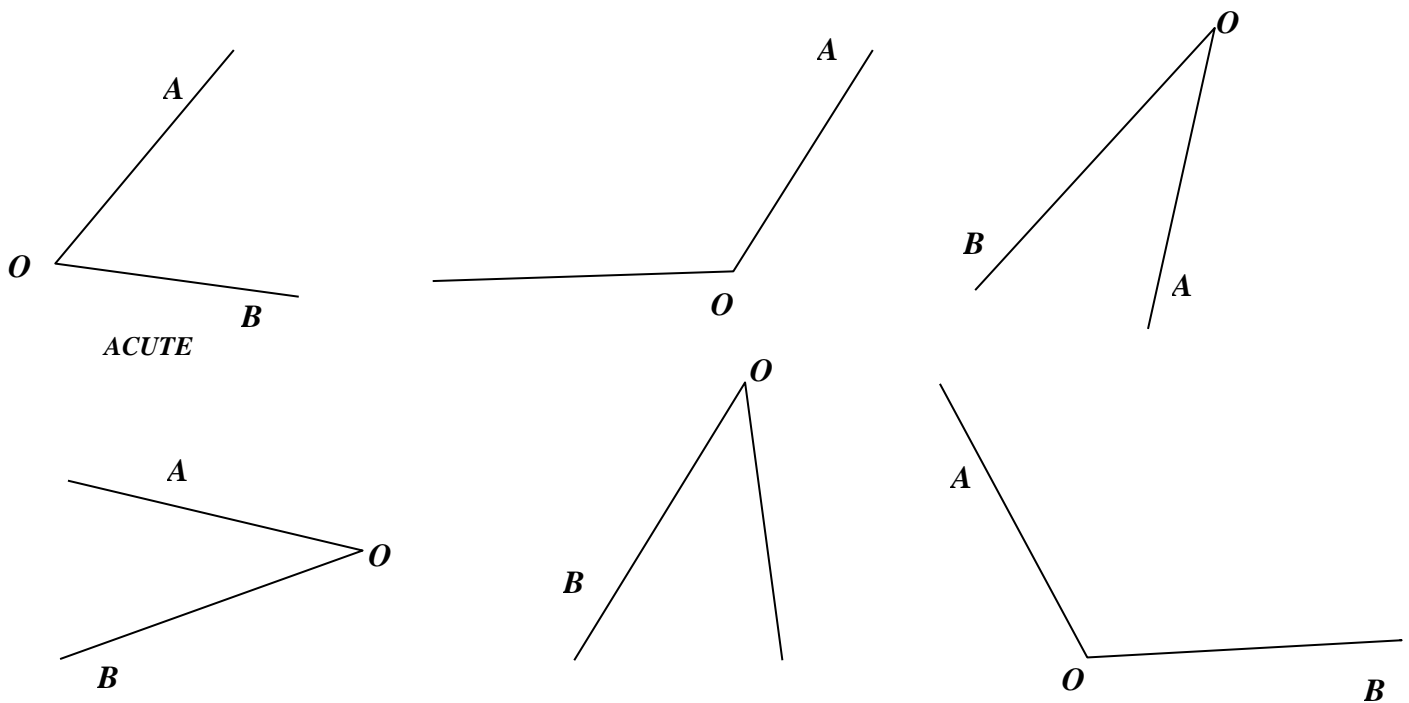
**4**

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



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

b) Use a ruler to plot ray OK so that 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.

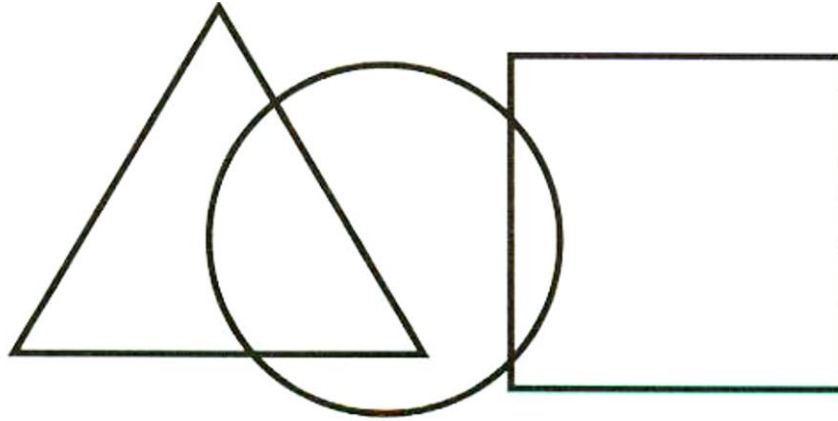
Perform the operations. What do you notice?

5

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

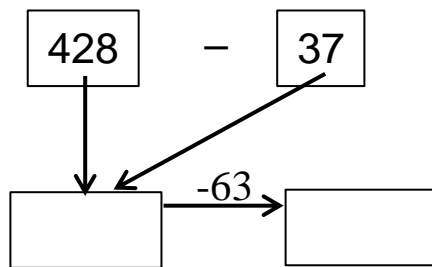
6

Color the circle, triangle and a square in a way that circle lies on the top of both triangle and square.

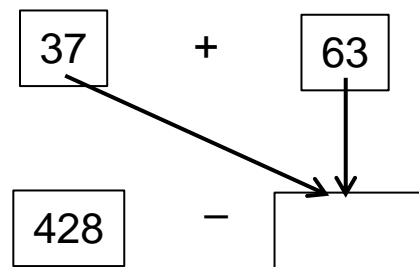


7

Write a correct expression in each case. Calculate the value of both expressions.



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[illegible]

8

Write down the following expressions:

The sum of m and n _____

The difference between 34 and x_____

The difference between 200 and 48_____

The sum of x and 18_____

9

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? _____

10

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.

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

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

11

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?)

1 step: Write down the first number

2 step: _____

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 you put the 1st plate in. 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?