school nova™

1

Write a correct expression for each problem and solve it:

a) One gift basket contains 5 pieces of fruit. How many pieces of fruit would be in 4 baskets?

_____

b) There are 6 pencils in the box. How many pencils would be in 5 boxes? _____

c) One pumpkin weighs as much as 2 watermelons. How many watermelons would balance 6 pumpkins? _____
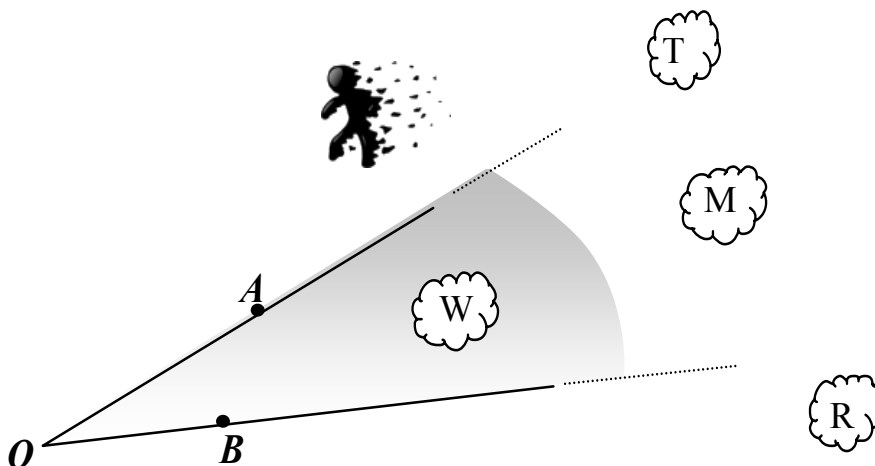
2

This year on the next day after my birthday I say: "the day after tomorrow is Wednesday", then my birthday is on (circle the correct answer):

A. Thursday   B. Monday   C. Tuesday   D. Wednesday   E. Sunday

3

Use a ruler to draw a ray starting from a point O – the vertex of angle AOB. A ray should go through clouds W and M.

4

Compare, using <, > or =:

$245 - a$ ____ $205 - a$ $m - 73$ ____ $m - 37$ $c + d$ ____ $d + c$

$b - 207$ ____ $b - 72$ $210 + n$ ____ $n + 211$ $40 - k$ ____ $140 - k$

5 Replace shapes with numbers to get an equality in each case.

$\hexagon \triangle + \triangle \hexagon = 77$ $\triangle \triangle + \hexagon \hexagon = 77$

$\square \bigcirc + \bigcirc \square = 77$ $\bigcirc \bigcirc + \square \square = 77$

$\pentagon \square + \square \pentagon = 77$ $\square \square + \pentagon \pentagon = 77$

1. *Example: 34 + 43 = 77*   4. _____

2. _____   5. _____

3. _____   6. _____

6 Find the sum using the most convenient method.

$5 + 15 + 25 + 35 + 45 + 55 + 65 + 75 + 85 + 95 =$ _____

7 Write down expressions:

a) Sam had A pencils, Nick had B pencils and Emily had C pencils. How many pencils did all three children have together? _____

b) There are A fishes in the first aquarium and 5 more fishes in the second aquarium. How many fishes are in the 2$^{\text{nd}}$ aquarium? _____
How many fishes are there altogether in the both aquariums? _____

8 Express in cm:

24dm = _____ cm   66dm = _____ cm   30dm = _____ cm

2dm 7cm = _____ cm   8dm 5cm = _____ cm   80dm 6cm = _____ cm

2m 3dm 4cm = _____ cm   4m 6dm 3cm = _____ cm   2m 7cm = _____ cm

9 Evaluate an expression $(110 - 2x)$:

If $x = 11$: _____

If $x = 20$: _____

If $x = 50$: _____

10 Calculate:

$$\begin{array}{r} 614 \\ +\,329 \\ \hline \end{array} \qquad \begin{array}{r} 407 \\ +\,309 \\ \hline \end{array} \qquad \begin{array}{r} \overset{9\ 10}{502} \\ -\,235 \\ \hline \end{array} \qquad \begin{array}{r} \overset{9\ 10}{700} \\ -\,521 \\ \hline \end{array}$$
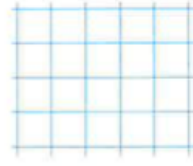
11 Insert the missing digits and check your answers:

$$\begin{array}{r} 3\,\square\,5 \\ +\ \square\,1\,\square \\ \hline 739 \end{array} \qquad \begin{array}{r} \square\,2\,\square \\ +\ 5\,\square\,3 \\ \hline 741 \end{array} \qquad \begin{array}{r} \square\,\square\,6 \\ -\ 3\,4\,\square \\ \hline 542 \end{array} \qquad \begin{array}{r} 6\,2\,\square \\ -\ \square\,\square\,3 \\ \hline 542 \end{array}$$
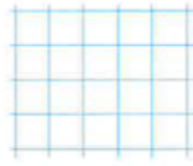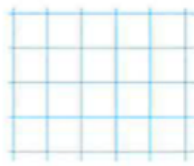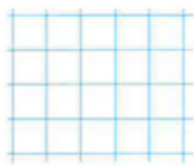
12 Collect the like items to simplify:

$12 + 6 - b - a + 32 + 2a + 2b - a - b =$ _____

$25 + a + 5a - 10 =$ _____

$3 + 237 - a + 4 - a + 7a =$ _____

13 Use a ruler.

- Plot straight line (*NQ*).
- Plot ray [*RT*).
- Label the intersection **M**.
- Plot segment [**MF**].

. *T*

. *Q*

. *N*

. *R*

. *F*
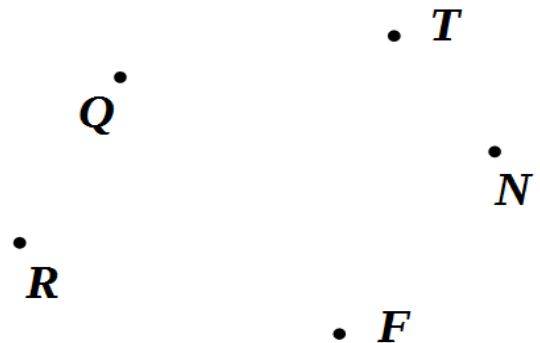
14 How many segments does polygonal line below have? _____

How many vertices (points where segments are **connecting to each other** or **end**)? _____

Is this chain closed or open? _____

Use three line segments to make it closed.

A_1 A_3 A_6 A_5 A_2 A_4

3