school nova™

Math 3. What did we learn this year?

Independent work

1 Calculate: Please look carefully at the signs and try to figure out the easiest way to do it!

a) $2{,}501 + 4{,}280 + 499 =$

b) $4{,}302 + 870 - 301 =$

c) $2{,}492 \div 7 =$

d) $325 \times 42 =$

2 Convert the following measurements.

3 m 5dm 6 cm = _____ cm   3m 6 cm = _____ cm

325 cm = _____ m _____dm _____ cm   56 cm = ____ dm ____ cm

3 Calculate (simplify to the lowest term where possible)

$$\frac{23}{50} - \frac{13}{50} = \qquad\qquad \frac{24}{100} + \frac{6}{100} = \qquad\qquad \frac{30}{75} - \frac{5}{75} =$$
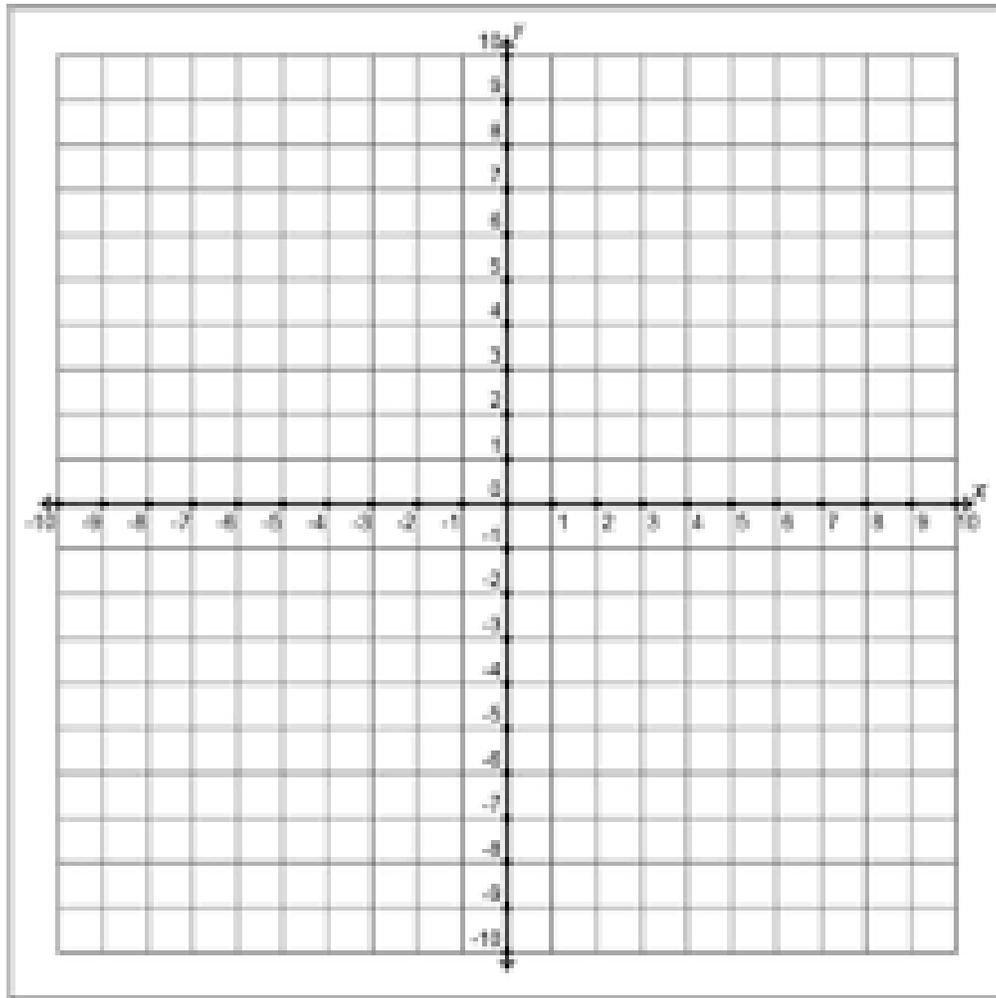
4 On the coordinate plane below, mark the points with the following coordinates and connect them. Color the quadrilateral you get with any color.

A (0,− 2)   B (0, 4)   C (7, −2)   D (7, 4)

5 Insert the missing fraction:

a) _____ $+ \dfrac{1}{3} = 1\dfrac{2}{3}$ b) $\dfrac{1}{3} +$ ____ $= 2\dfrac{2}{3}$ c) $\dfrac{3}{8} +$ _____ $= 3\dfrac{5}{8}$

6

Write down the mathematical expressions to solve the problems:

a) There are a total of 35 oranges packed in the 5 identical bags.
- How many oranges are in *one* bag? _____
- How many oranges will be in 10 such bags?_____

b) There are *x* oranges packed in 6 identical bags.
- How many oranges are in *one* bag? _____
- How many oranges will be in 7 such bags?_____

c) There are *20* oranges packed in *y* identical bags.
- How many oranges are in *one* bag? _____
- How many oranges will be in **w** such bags?_____

d) A snail moves along the cable 9 meters a day.
- How much will it move in 12 days?_____
- How many days will it take the snail to move 279 meters?_____

7

Calculate using the correct order of operations:

a) $9 + 5 \div (8 - 3) \times 2 =$ _____

b) $14 + 3(4 - 6 \div 3) =$ _____

8

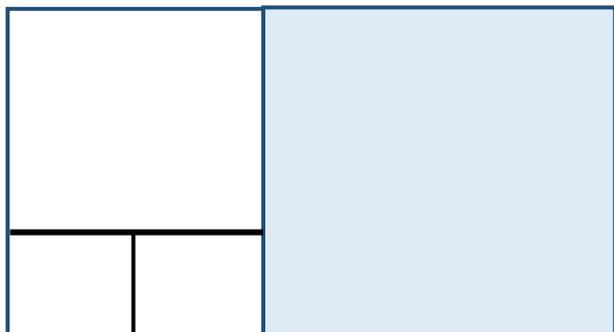Open parenthesis and simplify where possible:

a) $6(3 + a) - (a + b - c) =$_____

b) $3(c + d) + (d - c) =$ _____

c) $25 - 5(w + v - z - y) =$_____

9

The rectangle below is divided into 4 squares. Find a perimeter and an area of the big rectangle, if the side of the shaded square is 6cm . Don't forget the units of measurements.

P = _____

A = _____

10

Solve equations, make sure you check your results!

23 + **y** = 34   **x** - 63 = 127   35 + z ×5 = 60

y = _____   **x** = _____   _____

y = _____   **x** = _____   _____
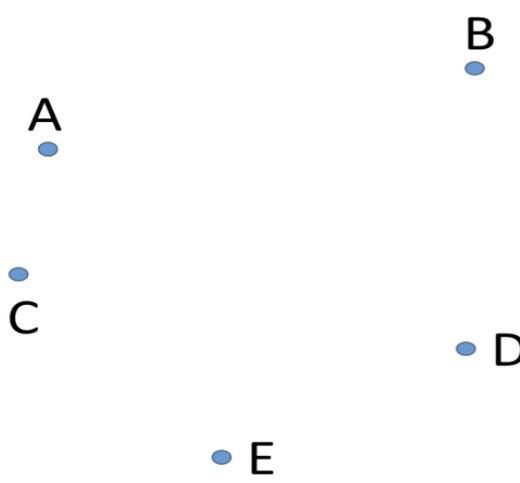
Check: _____   Check: _____   _____

Check:_____

11

a) Use a ruler and draw:

- ○ Draw a straight line $\overleftrightarrow{AD}$.
- ○ Draw a line segment $\overline{CB}$.
- ○ Label the intersection K.
- ○ Draw a ray $\overrightarrow{KE}$

b) Make a right-angle template.

Using a template check:

- Is angle ∠CKE obtuse? (YES, NO)

- Is angle ∠CKB acute? (YES, NO)

c) Use protractor to measure angles:

∠BKD = _____

∠AKE =_____

B

A

C

D

E

BONUS PROBLEMS
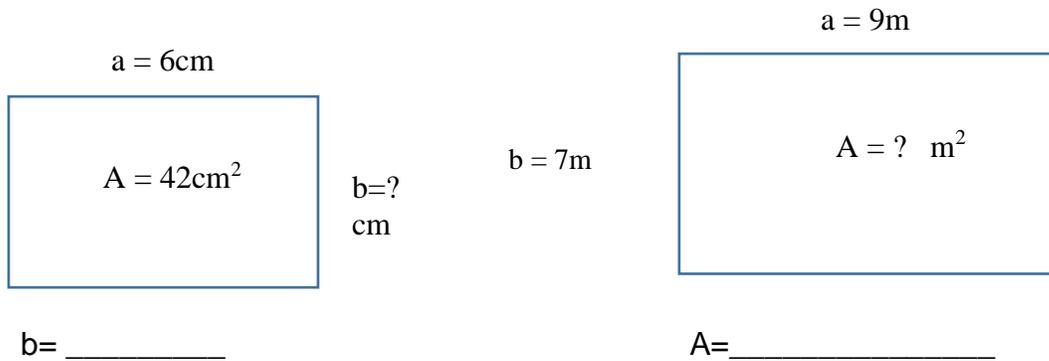Do them only if you have time after you finished and checked all the problems on the previous pages!

12*

How can you simplify the following? Remember the orders of operations!
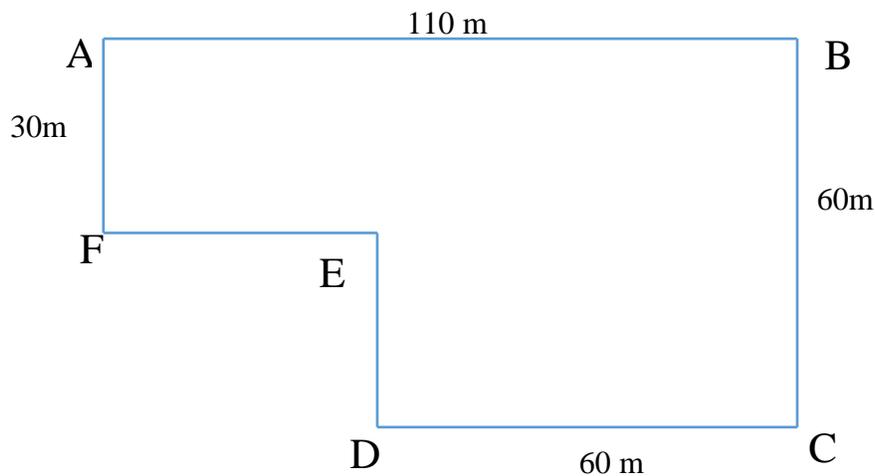
1) $6(3 + a) + 90 \div 10 + a =$ _____

2) $4 \times 7 + 2(4 - a) =$ _____

3) $10a + 2(a + b) + 20(b - a) =$ _____

4) $35 - 3(10 - z) + (z - 5) =$ _____

13*

Find area or side of the rectangle.

a = 6cm

$A = 42cm^2$

b=?
cm

a = 9m

b = 7m

$A = ?$ m^2

b= _____

A=_____

14*

Find the perimeter and the area of the following figure, if you know some of the sides:

110 m

A   B

30m

60m

F

E

D   60 m   C

P= _____

A=_____

5