## Math 3 Homework 15

## Calculate using the most optimal way:

a) $13+16+19+22+25+28+31+34+37=$ $\qquad$ $=$
$=$ $\qquad$
b) Calculate smartly. Look on the equations and decide where you need to remove parentheses and where you don't:
$14-(4-1)=$ $\qquad$
$\qquad$
$444-(44+400)=$ $\qquad$ $444-(44+400)=$ $\qquad$ $14-(4-1)=$ $\qquad$ $208-(100+8)=$ $\qquad$
c) Calculate:

$$
\begin{aligned}
& 3 \mathrm{dm} 7 \mathrm{~cm}+4 \mathrm{dm} 5 \mathrm{~cm}= \\
& 26 \mathrm{~cm}+3 \mathrm{dm} 8 \mathrm{~cm}= \\
& 7 \mathrm{dm} 2 \mathrm{~cm}-56 \mathrm{~cm}= \\
& 6 \mathrm{dm} 8 \mathrm{~cm}-9 \mathrm{~cm}=
\end{aligned}
$$

2 Calculate (remember about an order of operations):
$5 \times(4+2)=$ $\qquad$
$(4+3) \times 7=$ $\qquad$
$9 \times 4 \div 4+6=$ $\qquad$
$3 \times 4+8 \div 2=$ $\qquad$
$160-7 \times 4+1=$ $\qquad$
$12 \times 4-(28-6)=$ $\qquad$
$15+3 \times(27-20)=$ $\qquad$

Calculate:

| $60 \div 6=$ | $30 \div 10=$ | $46 \div 1 \div 46=$ | $20 \div 5=$ |
| :--- | :--- | :--- | :--- |
| $7 \div 7=$ | $70 \div 70=$ | $12 \div 12 \div 1=$ | $20 \div 4=$ |

Report the time you spent: $\qquad$

Bananas are packed in boxes, $\boldsymbol{m} \mathrm{kg}$ per each box.
Apples are packed in bags, $\boldsymbol{w}$ kg per bag. There are 4 boxes of bananas and 9 bags of apples.
Explain the meanings of the expressions below:


| $4 \times \boldsymbol{m}$ |  |
| :--- | :--- |
| $9 \times \boldsymbol{w}$ |  |
| $4 \times \boldsymbol{m}+9 \times \boldsymbol{w}$ |  |
| $4 \times \boldsymbol{m}-9 \times \boldsymbol{w}$ |  |
| $4+9$ |  |

5. Think of the question you should ask for each problem and solve the problems:
a) Sean has 18 markers. Her teacher gives her three boxes and asks her to put an equal number of markers in each box.

Q:
Solution:
b) Camilla has 18 markers. His teacher wants him to put 3 markers in each box until he is out of markers.

## Q:

Solution:

Emma spent $\$ 9$ on each of her 6 friends at the fair. How much money did she spend? $\qquad$
Aurora bought some games for her friends for $\$ 8$ each. If she spent a total of $\$ 48$, how many games did Nita buy? $\qquad$
Zoe spent an equal amount of money on each of her 7 friends at the fair. If she spent a total of $\$ 42$, how much did each friend get? $\qquad$

Calculate:
7.
$6 \times 6 \div 6=$

$$
7 \div 1 \times 7=
$$

$$
30 \div 30 \times 30=
$$

a) Use a ruler to plot ray $\boldsymbol{O K}$ so that ray $\boldsymbol{O B}$ would be inside the angle $\angle \boldsymbol{A O K}$ for each angle below:


ACUTE


Use right angle template. Label the angles as acute, right or obtuse.
b) Use a ruler to plot ray $\boldsymbol{O K}$ so that ray $\boldsymbol{O B}$ would be outside the angle $\angle \boldsymbol{A} \boldsymbol{O} \boldsymbol{K}$ for each angle below:


ACUTE



Use right angle template. Label the angles as acute, right or obtuse.
9. Below is a drawing of a straight angle $\angle \mathrm{BAE}$ (remember that a straight angle is always $180^{\circ}$ ). The angle $\angle \mathrm{DAE}$ equals $75^{\circ}$ and the angle $\angle \mathrm{BAC}=25^{\circ}$.
a) Find an angle $\angle C A D=$ $\qquad$
b) Find an angle $\angle B A D=$ $\qquad$
a) Find an angle $\angle C A E=$ $\qquad$


10 Choose one of the pictures below and copy it as accurate as you can. Make your picture larger.


