Math 3

## Warm-up

1. Solve

| 1 | $\bullet$ |  | $\bullet$ | 9 | $=$ | 45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bullet$ |  | $\bullet$ |  | $\bullet$ |  |  |
|  |  |  |  |  | $=$ | 84 |
| $\bullet$ |  | $\bullet$ |  | $\bullet$ |  |  |
| 8 |  |  |  | 2 | $=$ | 96 |
| ॥ |  | ॥ |  | ॥ |  |  |
| 56 |  | 90 |  | 72 |  |  |

2. Have you ever heard about "triangle numbers"?

Take a look at the pictures below. (You can draw them in you notebook or make them using coins). Notice how triangles change as the numbers increase.
The number of circles in each triangle is called "triangle number".
Make 5 more triangles like this. Write the corresponding "triangle numbers."


1


3


6

## Review

3. Put all the angles in the picture into the column where they belong

4. Solve
$234+x=342$

$$
x-458=133
$$

5. Look at the shapes in the middle. Which parts from left and right side can you use to make each shape. Write their numbers inside the circles under the whole shape. Draw lines between whole shape and it'parts.

6. Imagine that each shape was cut onto two parts. Finish the drawings of both parts.


## Ordered pairs.

Take a look at the diagram. This is called a grid. or a coordinate plane. The dark lines are the number lines. They are called the axes.

- The horizontal number line is called the $\mathbf{x}$-axis.
- The vertical number line is called the $y$-axis.
- The point where they join is called the origin.


The axes (plural) are numbered, starting from 0 at the origin.
If you are given one number from each axis, it is easy to find, or plot, the point on the grid. We call these numbers coordinates.

The two numbers needed to plot the point on the grid are called an ordered pair.

There are eight treasure chests hidden in a field. Only four of them really contain treasure. Luckily you have found a scrap of paper containing the coordinates of the real treasure chests. Can you find them on the grid and put a circle around each one?




## HW

1. Use long multiplication:

| $30 \times 11=$ | $15 \times 14=$ | $35 \times 20$ |
| :--- | :--- | :--- |
| $40 \times 25=$ | $34 \times 50=$ | $30 \times 11=$ |
| $21 \times 30=$ | $40 \times 17=$ | $11 \times 32=$ |
| $40 \times 53=$ | $42 \times 20=$ | $18 \times 13=$ |

2. 

Write the whole numbers not less than 0 and not greater than 24 in the correct sets.
a)

b)

|  | $\begin{aligned} & \text { Multiple } \\ & \text { of } 3 \end{aligned}$ | $\begin{gathered} \text { Not } \\ \text { a multiple } \\ \text { of } 3 \end{gathered}$ |
| :---: | :---: | :---: |
| $\begin{aligned} & 0 \\ & n_{3}^{2} \\ & \hline 0 \end{aligned}$ |  |  |
|  |  |  |

What can you say about the numbers in the shaded areas?
3.

- Jeremy had 45 baseball cards. For his birthday each of his 5 friends gave him 3 more cards. How many cards does he have now?
- Bob collected 154 shells for his project. He needs 15 times more shells to finish the project. How many shells total he needs for his project.
- Farmworkers were packing quail eggs. One big box contains 12 small boxes. One small box has 36 quail eggs. If they filled 5 big boxes, how many eggs did they pack?
- Jane tries to consume 25 grams of fiber every day. How much fiber will she consume in December?
- 1 tablespoon of salt weights 28 grams. How many grams are there in 15 tablespoons of salt?
- A car travels 55 miles per hour. How far it will go in 8 hours?

7. 

There are $\mathbf{C}$ kilograms of apples in each box. There are 5 boxes of green apples and 4 boxes of red apples. How many kilograms of apples are there all together.

There are $\boldsymbol{\lambda}$ kilograms of apples in one box and 2 times more apples in the other box. How many kilograms of apples are there in both boxes together.
Peter gets $\$ 1$ for each " B " and $\$ 2$ for each " $A$ ". If peter has $m$ " $A$ 's" and $n$ " $B$ ' $s$ " in his report card how much money he will get?

| $\square$ |
| :--- |
|  |
|  |
|  |

6. 



Tell what point is located at each ordered pair.

1. $(3,1)$ $\qquad$
2. $(1,4)$
3. $(8,7)$ $\qquad$
4. $(5,5)$ $\qquad$ 8. $(1,3)$

Write the ordered pair for each given point.

Write the ordered pair for each given point.
9. $\mathbf{A}$
10. T $\qquad$ 11. W
12. 0 $\qquad$ 13. $\mathbf{Q}$ $\qquad$

Plot the following points on the coordinate grid.
14. $\quad \mathbf{( 2 , 8 )}$
15. $\quad E(0,7)$
16. $X(6,3)$
17. $S(8,5)$
18. $\mathbf{P}(\mathbf{2}, \mathbf{1})$
19. $\mathbf{G}(\mathbf{7}, 7)$
20. Start at point $(\mathbf{0}, \mathbf{0})$. Go right three spaces.

Then, go up seven spaces. What point do you land on? $\qquad$
21. Start at point C. Go right seven spaces.

Then, go down one space. What point do you land on? $\qquad$
8. Remember "triangle numbers"? How about "square numbers". Here is how you can make them:


1


4


9

Draw 5 more squares and write the corresponding "square numbers".
9. Imagine that each shape was cut onto two parts. Finish the drawings of both parts.


