



Holden Christian Academy

Middle School Math

Summer 2023

Hello Mathematicians!

Summer is a time to take a break from daily class work and homework, but it is not a time to take a break from learning. This summer, your job is to play! Here are some games to play this summer that will keep your math skills fresh...

ADDITION, SUBTRACTION, MULTIPLICATION, POSITIVE AND NEGATIVE NUMBERS:

- One of the games that we played in class this year was Absolute Zero. You can play an at-home version of Absolute Zero using a regular deck of cards. A=1, J=11, Q=12, K=13. The red cards are negative numbers and the black cards are positive numbers.

GAME 1: Absolute Zero

- Deal each player 3, 4, or 5 cards depending on your selected difficulty level.
- Place the remaining cards face down in the center.
- Flip over the top card to create a discard pile.
- On your turn, you can either draw a card from the deck and discard a card from your hand OR pick up the top card from the discard pile and discard a card from your hand. At the end of your turn, you should have the same number of cards you were dealt at the beginning.
- Play continues in a circle until the numbers on the cards in one player's hand add up to zero.
- Everyone else gets one more turn to try to get zero.

GAME 2: Addition WAR

- Deal out all the cards.
- Flip over two cards and add the two numbers.
- The person with the highest score keeps the cards.
- If both players have the same score, flip over two more cards and add them together.
- The person with the highest score keeps all the cards.

GAME 2 VARIATION: Positive/Negative Addition WAR

- Play as above, except the red cards are negative numbers and the black cards are positive numbers.
- Remember:
 - when adding two positive numbers, the answer is positive
 - when adding two negative numbers, the answer is negative
 - when adding one positive number and one negative number, if the larger number is positive then the answer is positive and if the larger number is negative then the answer is negative.

GAME 3: Multiplication WAR

- Deal out all the cards.
- Flip over two cards and multiply the two numbers.
- The person with the highest score keeps the cards.
- If both players have the same score, flip over two more cards and add them together.
- The person with the highest score keeps all the cards.

GAME 3 VARIATION: Positive/Negative Multiplication WAR

- Play as above, except the red cards are negative numbers and the black cards are positive numbers.
- Remember:
 - when multiplying two positive numbers, the answer is positive
 - when multiplying two negative numbers, the answer is positive
 - when multiplying one positive and one negative number, the answer is negative.

GRAPHING, COORDINATE PLANES:

- Play Coordinate Plane Battleship (see attached).

ADDITION, MULTIPLICATION, PROBABILITY:

- Play Yahtzee with two or more people. (You will need 5 dice to play this game.)

ADDITION, SUBTRACTION, MONEY:

- Play Monopoly.

ADDITION:

- Go bowling. Ask if you can use a paper and pencil to track your score rather than using the electronic scoreboard.

Alternate Summer Work

If you would prefer more traditional math work this summer, you can click on the links below to review all that you learned last year.

ENTERING FIFTH GRADE: [4th grade | Math | Khan Academy](#)

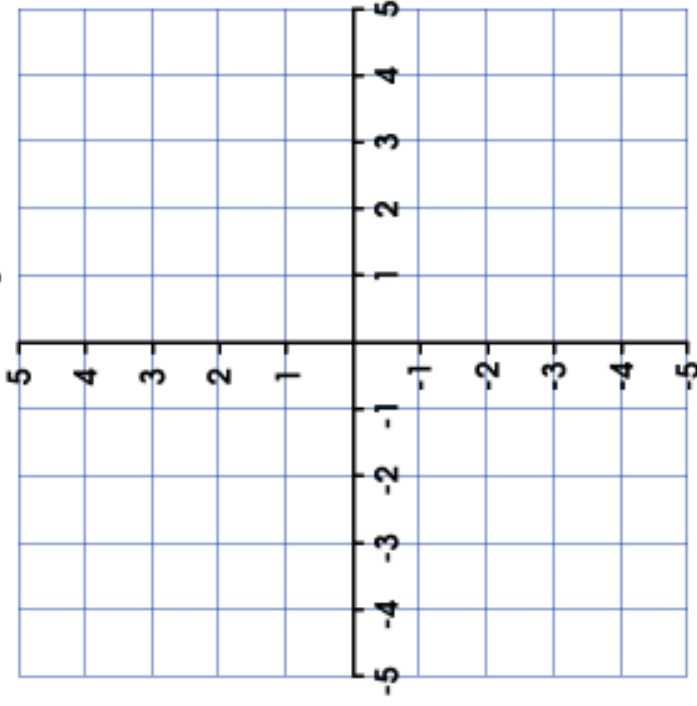
ENTERING SIXTH GRADE: [5th grade | Math | Khan Academy](#)

ENTERING SEVENTH GRADE: [6th Grade Math | Khan Academy](#)

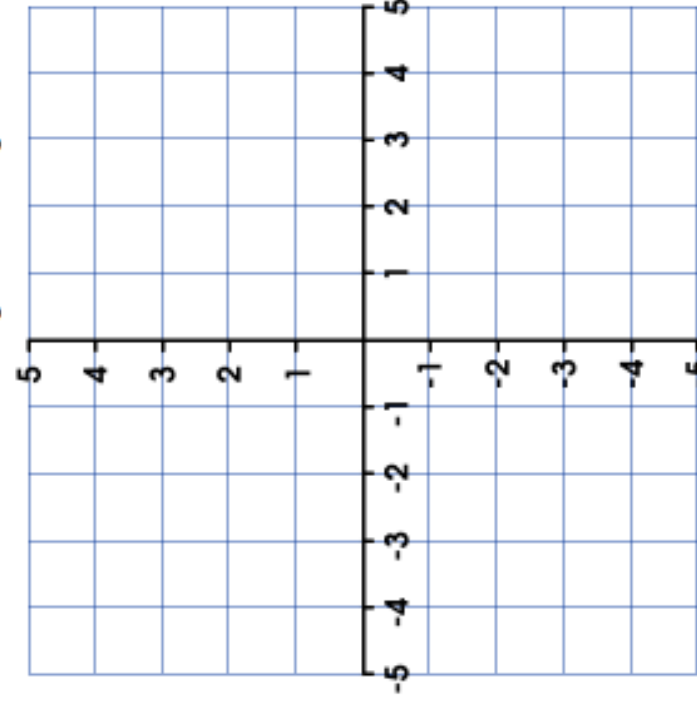
ENTERING EIGHTH GRADE: [Algebra Basics | Khan Academy](#)

Blessings,
Miss Legro

Your Map....



The Enemy's Map....



On your map, you need to mark 7 boats... two boats with 2 spots, 2 boats with 3 spots, 2 boats with 4 spots and a 5-spot boat. The spots in each boat can only be horizontal or vertical (NOT diagonal), and must be placed on the grid-lines.

Decide who is starting.

Try to guess where your enemy's boats are, by asking them for a co-ordinate. If it hits one of your boats' spots, draw a cross on that spot, and you get another guess... if it's a miss, draw a circle there and your enemy has a turn to guess where your boats are hidden.

Keep playing by taking turns until there is a winner – the one who sinks all SEVEN boats.

