SAM-D GAME

8

4+4 2×4

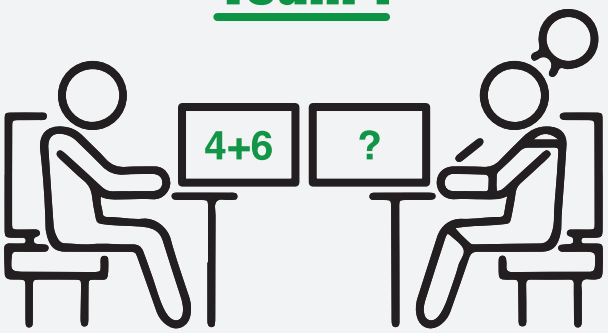
8×1 24-16

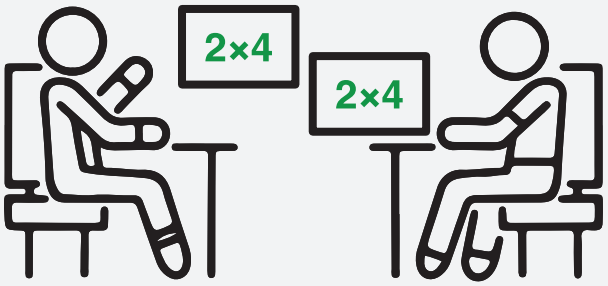
16/2

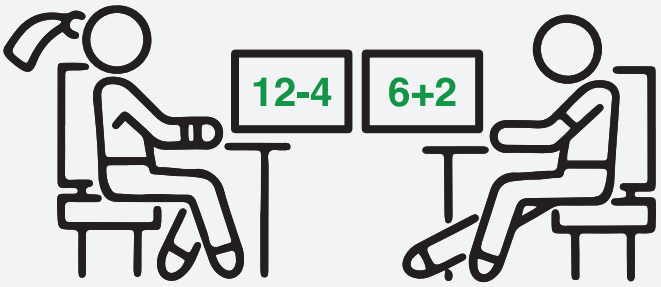
Team 1 Team 2

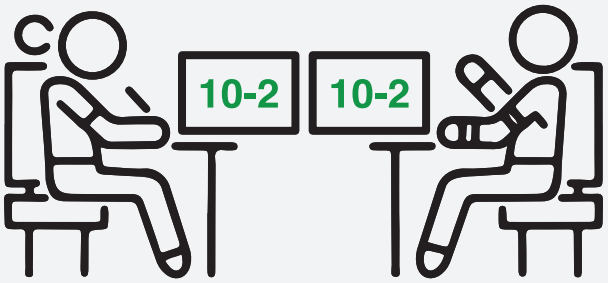
Multiplication Poster [Hidden]

Team 1

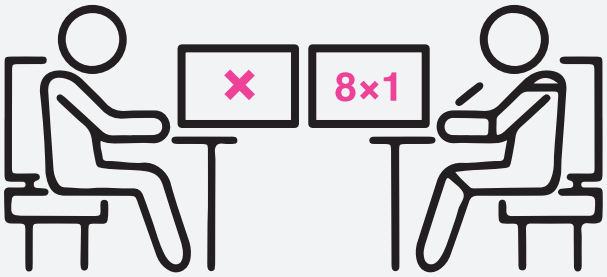


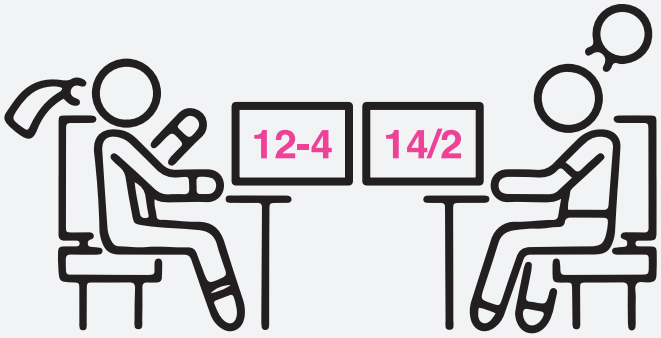


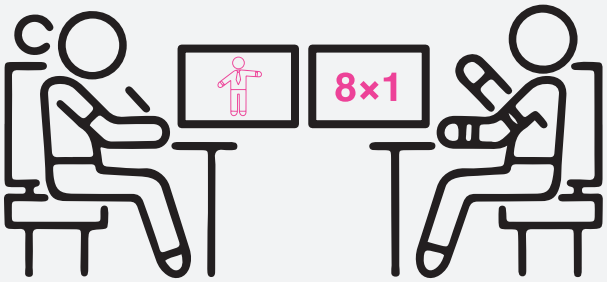


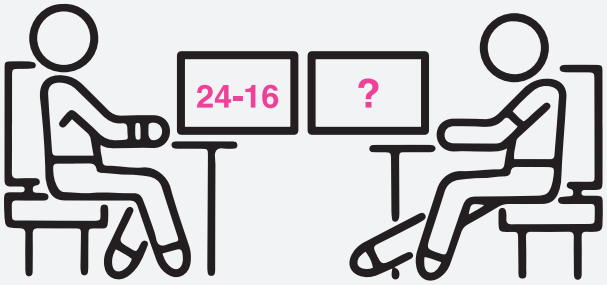


Team 2









SAM - D GAME: A math game focused on Multiplication (Grades 3 - 5)
Utilizes prior knowledge of Subtraction and Addition while building memory retention for Multiplication and Division knowledge. This game allows all students to participate using what they already know, striving for greater acquisition.

This is a great 5-10 minute warm up / warm down to math. It also works well when students are restless or tired and need a change of pace.

How to play the game:
When students on a team are shown a number such as "8" they must give two multiples of how to derive the answer (i.e., 2 x 4 or 1 x 8). If they don't know the desired multiplication answers they can use addition, subtraction, or even division to derive an answer (i.e., 4 + 4, 24 - 16, 16/2, and others). If they can get a corrct outcome they earn 1 point for their team.
Each team gets a chance for a different but correct outcome. More points could be offered for a specific outcome. A timer could be used to set time limits for calculating answers.

Recommendations:
1.) Assign teams in 2 rows each so adjacent students can help each other find the correct answer. Encourage team members to help one another and demonstrate to each other how they found the correct answer.

2.) Give students scratch paper to calculate answers.

3.) Model how the game works. ("I do.")

4.) Have them try solving simple examples with you. ("We do.")

5.) Play a sample round. ("They do.")

6.) Students get 10 or more seconds to answer.

7.) Teachable moments and Strategies: Help struggling students to utilize calculation and recall strategies to get correct answers

Strategy 1: The Grouping Method
How to solve 3 x 4 = ?

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  4  or  3
  4      3
+ 4      3
 12    + 3
         12
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Strategy 2: Memorization of Counting by 5's or 10's to the Nearest Answer
Ex. 7 x 7 = 49 Count by 5's to 7 x 5 = 35, now add 7 more, which equals 7 x 6 = 42. Now add 7 more to get 7 x 7 = 49!

Strategy 3: Consider having a multiplication table on the board or a poster. Cover it up until students struggle with a particular row of products. Have students repeat after you the factors and product for each number set in a chosen row. Verbal repetition is another way to reinforce memorization.

Strategy 4: Multiples that Rhyme as a mnemonic device
Students read and rhyme their way to memorization such as "six times six is thirty-six" or "six times eight is forty-eight."

Strategy 5: Using the 9 Times Tables Trick with your fingers (look online for this one).

Strategy 6: Demonstrate and repeat these strategies periodically as a recall device for a chossen set of factors and product(s) that students struggle with.

8.) Now back to the Game: For the next round let the team(s) with incorrect answers go first. Keep the problems simple so they can get points.

9.) A variation would be to give more points for the desired outcome (i.e., multiplication or division). Take away points for those shouting out answers out of turn.

10.) Please adapt and make changes to this game to suit your own group of students. Have fun with this!