

Marvin's Math Sprint

Math Jungle Challenge

Ready to help Marvin find the Hidden Treasure in the Math Jungle? Solve problems, earn steps, and race against the clock in this fast-paced math challenge!



Prepare:

- Print this worksheet and have a pencil or marker ready.
- Set a timer for 5 minutes.

Your Mission:

Help Marvin journey through the Math Jungle to find the Hidden Treasure! In this 5-minute challenge, earn “steps” by solving math problems. Once the time is up, check your answers with the Answer Key and mark your progress along the Journey Track by placing a dot on the tiles for each correct answer. If you accumulate 22 steps—meaning all your answers are correct—Marvin will discover the treasure!

Good luck, Math Cat—help Marvin uncover the Hidden Treasure in the Math Jungle!



Gameplay:

- When the timer starts, solve the 10 math problems below in order.
- Each problem shows a “Step Value” (the number of steps Marvin advances if answered correctly).
- Once the 5 minutes are up, check your answers using the Answer Key below, and total your steps along the Journey Track.
- If you reach 22 steps, Marvin has found the Hidden Treasure!

Important: Do not check your answers until you have completed the Math Sprint.



Math Problems:

For each problem, if you answer correctly, move Marvin forward by marking dots equal to the Step Value on the Journey Track below.

1. Marvin is building a rectangular playground that is 8 units long and 5 units wide. What is the perimeter of the playground?
(Step Value: 2)

Answer: _____

2. Marvin has $\frac{3}{4}$ of a chocolate bar. He wants to share it equally between himself and Dusty. How much of the chocolate bar does each get? **(Step Value: 2)**

Answer: _____

3. Marvin scored 18 out of 20 questions correctly on his math quiz. What percentage did he score? **(Step Value: 2)**

Answer: _____

4. In Marvin's garden, the ratio of tulips to roses is 3:2. If there are 15 tulips, how many roses are there? **(Step Value: 2)**

Answer: _____

5. Marvin is painting a square wall that has a side length of 6 units. What is the area of the wall? **(Step Value: 2)**

Answer: _____

6. Marvin has a box with 4 red, 5 blue, and 3 green marbles. If he picks one marble at random, what is the probability it will be green? **(Step Value: 2)**

Answer: _____

7. Marvin can read 30 pages in 45 minutes. How many pages can he read per minute? **(Step Value: 2)**

Answer: _____

8. Marvin draws a triangle with vertices at (2, 3), (4, 3), and (3, 5). If he reflects the triangle over the y-axis, what are the new coordinates of the vertices? **(Step Value: 3)**

Answer: _____

9. Marvin bought 3.5 units of apples and 2.75 units of oranges. What is the total weight of the fruits he bought? **(Step Value: 2)**

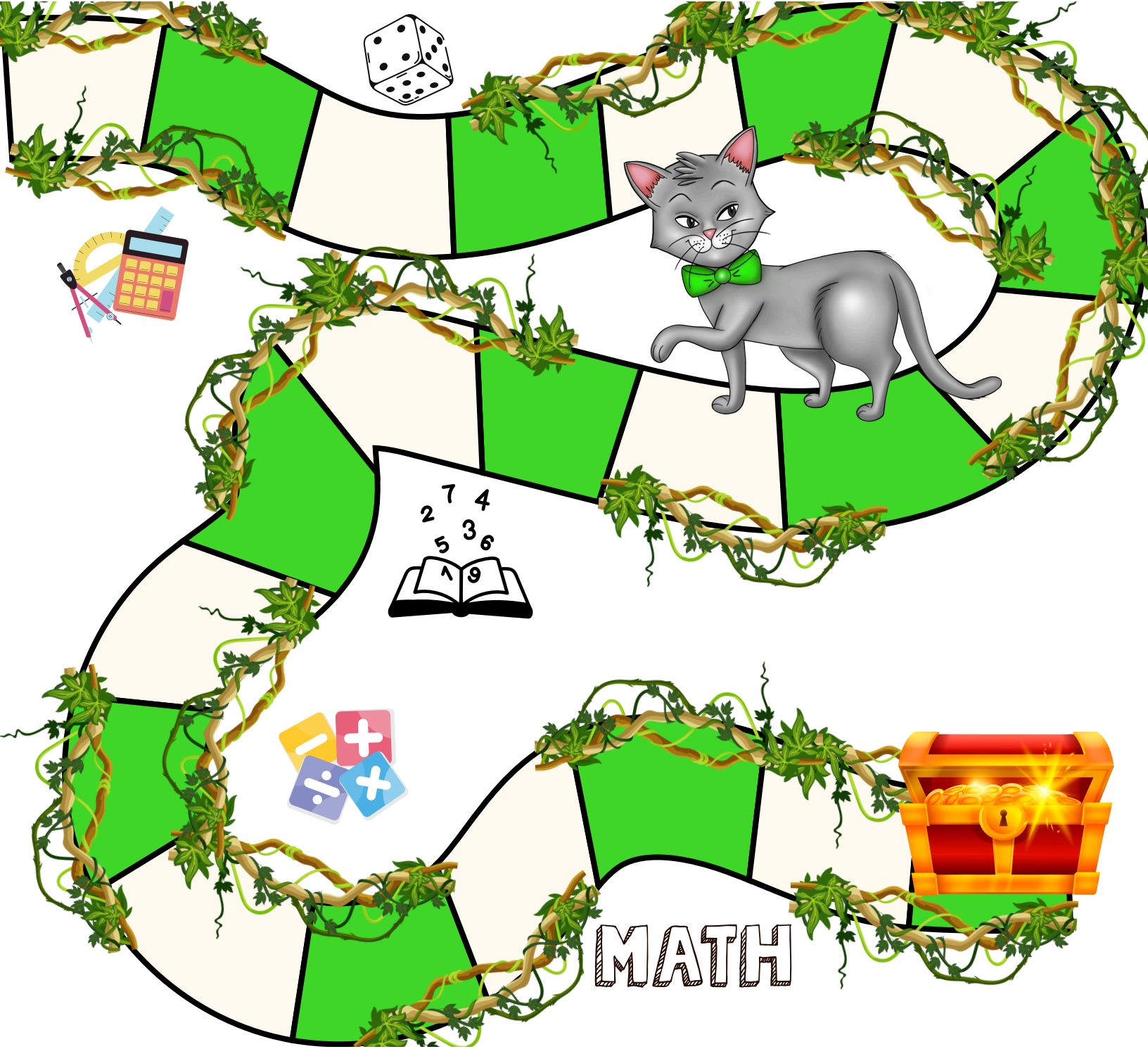
Answer: _____

10. Calculate the following: $5 + 2 \times (8 - 3)$ **(Step Value: 3)**

Answer: _____



Marvin's Journey Track Through the Math Jungle

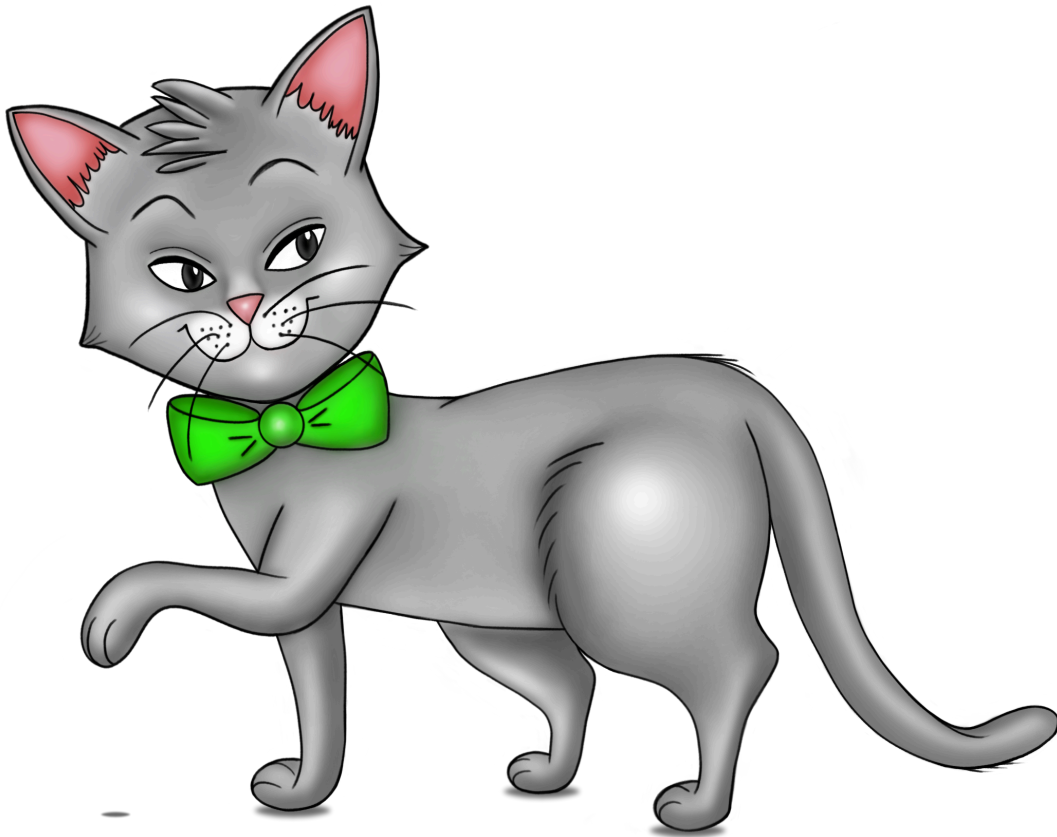


Final Challenge:

After playing, challenge yourself further by creating your own math sprint game and making up new problems to challenge your friends!

Remember:

Practice makes purrfect—try the sprint again and beat your own score!



Answer Key:

- 1. Perimeter:** $\text{Perimeter} = 2 \times (\text{Length} + \text{Width}) = 2 \times (8 \text{ units} + 5 \text{ units}) = 2 \times 13 \text{ units} = 26 \text{ units}.$
- 2. Fractions:** Each gets half of $\frac{3}{4}$, which is $\frac{3}{4} \div 2 = \frac{3}{8}$ of the chocolate bar.
- 3. Percentages:** $\frac{18}{20} = \frac{9}{10} = 0.9 \times 100 = 90\%.$
- 4. Ratios:** If the ratio is 3:2, then for every 3 tulips, there are 2 roses. So, $(15 \text{ tulips} \div 3) \times 2 = 5 \times 2 = 10 \text{ roses}.$
- 5. Area:** $\text{Area} = \text{Length} \times \text{Width} = 6 \text{ units} \times 6 \text{ units} = 36 \text{ square units}.$
- 6. Probability:** $\text{Total marbles} = 4 + 5 + 3 = 12.$ Probability of green = $\frac{\text{number of green marbles}}{\text{total marbles}} = \frac{3}{12} = \frac{1}{4} = 25\%.$
- 7. Rates:** $\text{Pages per minute} = \frac{\text{Total pages}}{\text{Total minutes}} = \frac{30 \text{ pages}}{45 \text{ minutes}} = \frac{2}{3} \text{ pages per minute} \approx 0.67 \text{ pages per minute}.$
- 8. Transformations:** Reflecting over the y-axis changes the sign of the x-coordinates. New coordinates: $(-2, 3), (-4, 3),$ and $(-3, 5).$

9. **Decimals:** Total weight = 3.5 units + 2.75 units = 6.25 units.

10. **Order of Operations:** $5 + 2 \times (8 - 3) = 5 + 2 \times 5 = 5 + 10 = 15$.

