

**MATH FACTS**

**GRADES  
2 - 6**



A Year-Long Math Fact Road Race Around the Classroom Walls

# **FORMULA FUN FACT CAR RALLY**

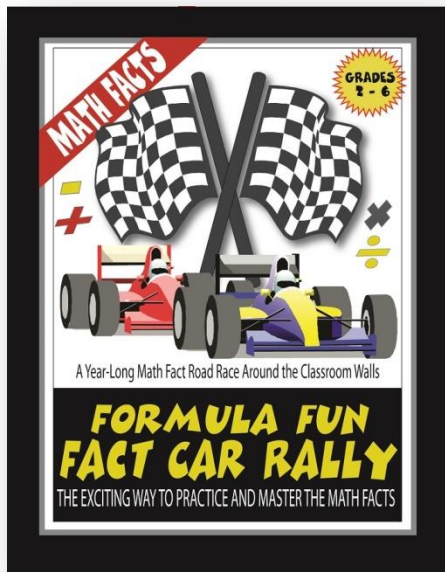
THE EXCITING WAY TO PRACTICE AND MASTER THE MATH FACTS

# Thank you for purchasing creative classroom content from ReadAloudPlays.com!

“Better than Rocket Math!” Fact Car Rally is the “Amazing Race” or the “Baja 1000” of the math world. Students “race” cars along an imaginary cross-country rally route set-up on the classroom walls. Students advance their race cars by passing one-minute fact quizzes in addition, subtraction, the times tables, multiplication, and/or division, demonstrating ever-advancing mastery as they go. Suitable for grades 2 - 6, the teacher determines which combination of sets is best for the given class.

Setting up and using Fact Car Rally is easy, and your kids will love it! 170 pages!  
Completely revamped and improved in 2023! **Download the free preview for a closer look!**

**If the script meets your needs, please be sure to follow me and leave a positive review. Remember, anything less than 5 out of 5 stars is considered negative. Thanks!**



**“Formula Fun”  
FACT CAR RALLY RACE**  
A Systematic One-Minute Math Fact Practice Program  
Addition, Subtraction, Multiplication, and Division for Grades 2 to 6  
By Mack Lewis

**Table of Contents**

- 4 Introduction and Instructions
- 7 Race Cars Templates
- 16 Create-your-own Race Cars
- 17 Start & Finish Graphics
- 18 Champion and Medalist Certificates
- 20 Road Signs & Ribbons Raceway Graphics *(road signs are coordinated with individual fact sets)*:
  - 20 Addition (+) 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Mixed
  - 24 Subtraction (-) 2, 3, 4, 5, 6, 7, 8, 9, 10, Mixed & Mixed 9, Blue Ribbon, Checkered Flag
  - 27 Times Tables (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)
  - 30 Mixed Multiplication (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Blue Ribbon)
  - 33 Division (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Blue Flag, Checkered Flag)
- 36 Reproducible TEST Sheets
  - 37 Addition
  - 51 Subtraction
  - 65 Times Tables
  - 76 Mixed Multiplication
  - 88 Division
- 100 Reproducible PRACTICE sheets
- 163 Score Sheets *(from MackLewis.com for final version)*

**Although graphics are often in color, all materials can be printed in black & white**

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**START YOUR ENGINES!**

**SPEED LIMIT X5**

Fact Car Rally is the “Amazing Race” or the “Baja 1000” of the math world. Students “race” cars along an imaginary cross-country rally route set-up on the classroom walls. Students advance their race cars by passing one-minute fact quizzes, demonstrating ever-advancing mastery as they go.

The Fact Car Rally format takes advantage of each child’s competitive nature, and the customizable race cars allow kids to express their inner Picasso. It’s a great way to motivate kids to memorize the math facts!

Fact quizzes in addition, subtraction, the times tables, mixed-multiplication, and division are designed to each last one minute, but the teacher determines the standard for “mastery” and has the power to modify the timing. Suitable for from second grade to sixth, the teacher determines which combinations of sets are appropriate for the given grade level.

Setting up and using Fact Car Rally is easy! Follow these steps to build your track once, and then use it year after year!

**THE MOTOR ROUTE**

Take 12 x 18” black construction paper and cut it into three 4 x 18 inch strips (if short on space, trim to shorter lengths). Use white or yellow crayon, chalk, or colored pencil to mark a dashed center line to represent the roadway. Attach these strips to your classroom walls to form the route. Try to make the route continuous, with inclines, grades, and straightaways. Imagine “turnoffs” where windows, doors, or other structures create breaks. Place the roadway low enough to where you can access it on a step-stool or chair, but high enough so that students won’t be able to reach. Plan your route based on the fact sets you plan on using, attaching one strip for each. Note that the cars and road signs are oriented in a counter-clockwise, or right-to-left, direction.

**THE ROAD SIGNS**

Cut out the appropriate road sign for each fact set. There are also “blue ribbons” at the end of each section. For younger students, you may wish to use only the addition and subtraction sets. For example, when teaching third grade, I’ve used the Subtraction, Times Tables, and Mixed Multiplication sections, but when teaching fourth and fifth, I use the Times Tables, Mixed Multiplication, and Division sections. Use what makes sense for you and your students. Whichever

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**RALLY RACE CAR: SPORTY**

Customizing your own rally race car is easy as ready, set, go! **READY:** Select your ride and give it a paint job with colored pencils or crayons. Be sure to display your race number on the side of the vehicle!  
**STEP:** Carefully trim around the edges and then glue the car to black construction paper. **GO:** Trim around the edges once more leaving a shadow of the black exposed. Run it through a laminator for an even better finish.

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**FACT CAR RALLY RACE 8 TIMES TABLE**

Name: \_\_\_\_\_

Date: \_\_\_\_\_ TIP: WORK ACROSS THE PAGE, NOT DOWN

8 x 0 =	8 x 1 =	8 x 2 =	8 x 3 =	8 x 4 =
8 x 5 =	8 x 6 =	8 x 7 =	8 x 8 =	8 x 9 =
8 x 10 =	8 x 11 =	8 x 12 =	0 x 8 =	1 x 8 =
2 x 8 =	3 x 8 =	4 x 8 =	5 x 8 =	6 x 8 =
7 x 8 =	8 x 8 =	9 x 8 =	10 x 8 =	11 x 8 =

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8 x 0 =	8 x 1 =	8 x 2 =	8 x 3 =	8 x 4 =
8 x 5 =	8 x 6 =	8 x 7 =	8 x 8 =	8 x 9 =
8 x 10 =	8 x 11 =	8 x 12 =	0 x 8 =	1 x 8 =
2 x 8 =	3 x 8 =	4 x 8 =	5 x 8 =	6 x 8 =
7 x 8 =	8 x 8 =	9 x 8 =	10 x 8 =	11 x 8 =

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# "Formula Fun" FACT CAR RALLY RACE

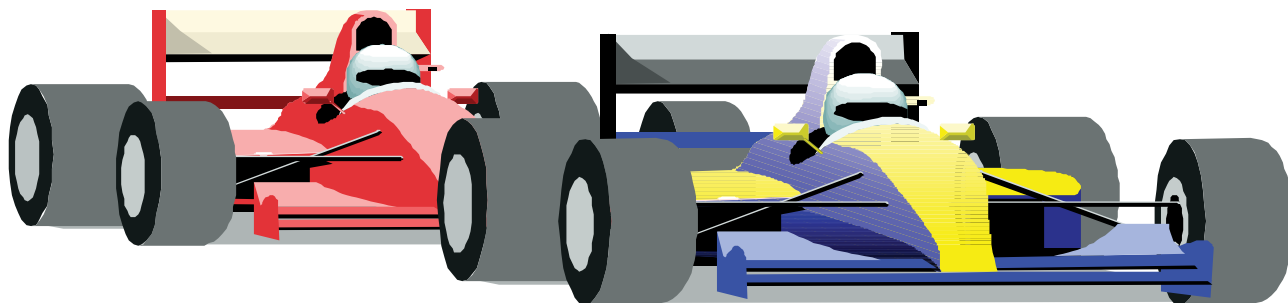
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24	Subtraction <i>(-1, -2, -3, -4, -5, -6, -7, -8, -9, -10, Mixed A, Mixed B, Blue Ribbon, Checkered Flag)</i>
27	Times Tables <i>(x2, x3, x4, x5, x6, x7, x8, x9, x10, x11, x12)</i>
30	Mixed Multiplication <i>(x2, x3, x4, x5, x6, x7, x8, x9, x10, x11, x12, Blue Ribbon)</i>
33	Division <i>(/2, /3, /4, /5, /6, /7, /8, /9, /10, /11, /12, White Flag, Checkered Flag)</i>
37	Reproducible Time Trials TEST Sheets
38	Addition
52	Subtraction
66	Times Tables
77	Mixed Multiplication
89	Division
102	Reproducible PRACTICE sheets
165	Score Sheets <i>(Visit <a href="http://MackLewis.com">MackLewis.com</a> for Excel versions)</i>

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## START YOUR ENGINES!



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## THE MOTOR ROUTE

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*The rally race route during beta testing of the program.*

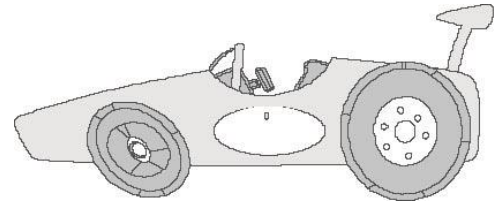
## THE ROAD SIGNS

Cut out the appropriate road sign for each fact set. There are also “blue ribbons” at the end of each section. For younger students, you may wish to use only the addition and subtraction sets. For example, when teaching third grade, I’ve used the **Subtraction**, **Times Tables**, and **Mixed Multiplication** sections, but when teaching fourth and fifth, I use the **Times Tables**, **Mixed Multiplication**, and **Division** sections. Use what makes sense for you and your students. Whatever

you do, be sure to use the **Times Tables** section *prior* to **Mixed Multiplication**. Staple the road signs in order every 18” along the route (wherever two black strips meet). For added permanence, consider mounting all materials on construction paper, card stock, or tag board, and laminating before trimming. Although road signs appear in color, they work just as well when printed in B&W.

## THE RACE CARS

Photocopy a few class sets of the race car icons (pages 7-15) and allow students to select the vehicle that suits their interest. The cars are printed in faded grey-scale so that kids can customize them using colored pencils or fine-tipped markers. Have them incorporate their name into their design (or for confidentiality purposes, use just a race number). Students also have the option of designing their own racer using the form on page 16. My one rule is that the vehicle must have wheels. Consequently I’ve had such creative endeavors as fishbowls on scooter boards and elephants wearing roller skates! Note again the counter clockwise direction of the track. Once complete, students should mount their car on construction paper, card stock, or tag board. If possible, laminate each vehicle. Affix them to the starting section of the race track using push pins or, better yet, sticky putty (my favorite is from Loctite and sold at the hardware store). You’re now ready to start racing!

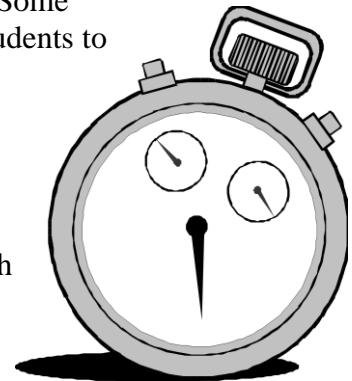


## THE TIME TRIALS

Because students will use the fact sheets multiple times as they practice and test, you’ll want to print at least one hundred of each sheet and organize them in a manner that works for you. Many teachers use a shoebox with labeled tag board dividers for each fact set. Some teachers maintain one box for testing with the teacher and another for students to access when practicing.

## MODIFICATIONS

How you test students is up to you. Many teachers set aside a period each week in which kids practice and study their facts (using a variety of approaches, including the fact sheets themselves), while the teacher calls up small groups of 6 to 10 students at a time. The fact sheets are designed to be completed in one minute or less with 100% accuracy, but you can modify them by allowing more time, or allowing a limited number of mistakes, especially with younger children. In my classroom, students must finish within one minute (though I sometimes fudge a few extra seconds) but are allowed one mistake or unanswered problem per sheet. I also modify the program for struggling students (see below).



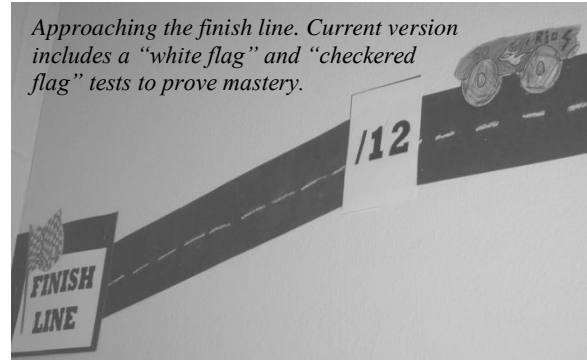
## FAST RESULTS

It’s a long race, so pacing is everything! Because of the “raceway” concept, immediate, fast-paced feedback is essential. This way, motivated students can move their car through several sections of

road in one class period. After each small group test, quickly correct each sheet. You'll find that as you get comfortable with the program, you can visually scan each sheet in a matter of seconds. Mark successful students on your score sheet immediately so they can begin practicing the next set. Return unfinished or incorrect sheets to students for additional study. It's important that students review their work to find out where and why they're stumbling. One a week, advance the cars around the track so that students can visually see their progress. (Note: it's not recommended that you allow students to move their own cars or that you try to move them during the test sessions themselves.)

## SCHEDULE

It's important to provide practice and testing sessions consistently each week (once you get started, students are unlikely to let you get away with skipping a week). It's also a good idea to have chronological markers along the route. You might work with students to establish quarterly goals. In my classroom, our goal is that every student complete the times tables by Thanksgiving, mixed multiplication by Spring Break, and division by year end. Even with just one 45 minute session per week, the majority of my students are able to meet these goals.



## STRUGGLING STUDENTS

As with any activity, some students will struggle and fall behind in the race. Kids with small motor issues may need more than 60 seconds, kids with behavioral challenges may need more directed supervision during practice sessions, and students with anxiety may need private testing sessions outside the regular class. Modify procedures and expectations as necessary.

## REWARDS



When the checkered flag waves, what's the reward? For many students the reward may be as simple as the satisfaction of winning the race or completing the route, but teachers can reward student performance any way they see fit. Perhaps fast finishers will earn higher marks on their report cards, a special prize, or be awarded a certificate (such as the one appearing elsewhere in this product). You decide. Whatever the case, your score sheets provide the data necessary to quantify your assessment of each child's level of mastery.

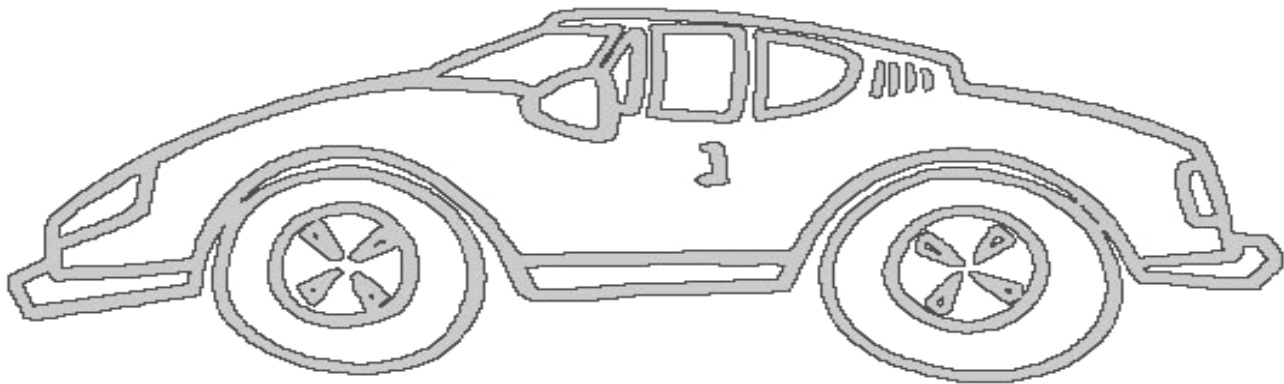
## LOG-IN

Thanks for choosing "Formula Fun" **FACT CAR RALLY** to lead your students to math fact mastery. For updates, tips, free Excel forms, and an opportunity to share your experiences using **FACT CAR RALLY**, visit [MackLewis.com](http://MackLewis.com) or [ReadAloudPlays.com](http://ReadAloudPlays.com).



## **RALLY RACE CAR: SPORTY**

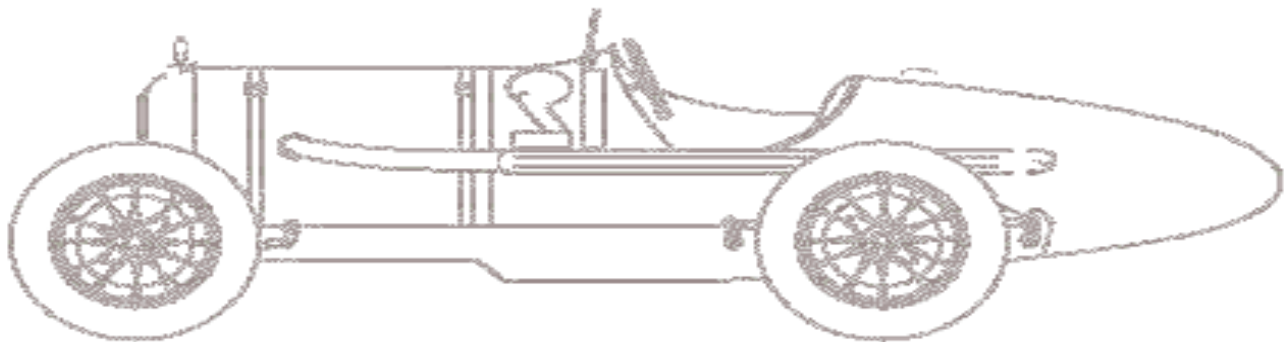
Customizing your own rally race car is easy as ready, set, go! **READY:** Select your ride and give it a paint job with colored pencils or crayons. Be sure to display your race number on the side of the vehicle! **SET:** Carefully trim around the edges and then glue the car to black construction paper. **GO:** Trim around the edges once more leaving a shadow of the black exposed. Run it through a laminator for an even better finish.



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**DIVISION**



**DIVISION; CHECKERED FLAG IS PLACED AFTER WHITE FLAG**





## FACT CAR RALLY RACE

**-6**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

$7 - 6 =$

$13 - 6 =$

$16 - 6 =$

$10 - 6 =$

$15 - 6 =$

$6 - 6 =$

$8 - 6 =$

$18 - 6 =$

$11 - 6 =$

$17 - 6 =$

$16 - 6 =$

$12 - 6 =$

$9 - 6 =$

$6 - 6 =$

$8 - 6 =$

$9 - 6 =$

$7 - 6 =$

$16 - 6 =$

$15 - 6 =$

$14 - 6 =$

$13 - 6 =$

$10 - 6 =$

$12 - 6 =$

$6 - 6 =$

$11 - 6 =$



## FACT CAR RALLY RACE

**-6**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

$7 - 6 =$

$13 - 6 =$

$16 - 6 =$

$10 - 6 =$

$15 - 6 =$

$6 - 6 =$

$8 - 6 =$

$18 - 6 =$

$11 - 6 =$

$17 - 6 =$

$16 - 6 =$

$12 - 6 =$

$9 - 6 =$

$6 - 6 =$

$8 - 6 =$

$9 - 6 =$

$7 - 6 =$

$16 - 6 =$

$15 - 6 =$

$14 - 6 =$

$13 - 6 =$

$10 - 6 =$

$12 - 6 =$

$6 - 6 =$

$11 - 6 =$



## FACT CAR RALLY RACE

## 5 TIMES TABLE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

TIP: WORK ACROSS THE PAGE, NOT DOWN

$5 \times 0 =$

$5 \times 1 =$

$5 \times 2 =$

$5 \times 3 =$

$5 \times 4 =$

$5 \times 5 =$

$5 \times 6 =$

$5 \times 7 =$

$5 \times 8 =$

$5 \times 9 =$

$5 \times 10 =$

$5 \times 11 =$

$5 \times 12 =$

$0 \times 5 =$

$1 \times 5 =$

$2 \times 5 =$

$3 \times 5 =$

$4 \times 5 =$

$5 \times 5 =$

$6 \times 5 =$

$7 \times 5 =$

$8 \times 5 =$

$9 \times 5 =$

$10 \times 5 =$

$11 \times 5 =$



## FACT CAR RALLY RACE

## 5 TIMES TABLE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

TIP: WORK ACROSS THE PAGE, NOT DOWN

$5 \times 0 =$

$5 \times 1 =$

$5 \times 2 =$

$5 \times 3 =$

$5 \times 4 =$

$5 \times 5 =$

$5 \times 6 =$

$5 \times 7 =$

$5 \times 8 =$

$5 \times 9 =$

$5 \times 10 =$

$5 \times 11 =$

$5 \times 12 =$

$0 \times 5 =$

$1 \times 5 =$

$2 \times 5 =$

$3 \times 5 =$

$4 \times 5 =$

$5 \times 5 =$

$6 \times 5 =$

$7 \times 5 =$

$8 \times 5 =$

$9 \times 5 =$

$10 \times 5 =$

$11 \times 5 =$



## FACT CAR RALLY RACE

## MIXED X5

Name: \_\_\_\_\_

Date: \_\_\_\_\_

$5 \times 6 =$

$5 \times 5 =$

$11 \times 5 =$

$5 \times 3 =$

$5 \times 8 =$

$7 \times 5 =$

$5 \times 12 =$

$5 \times 10 =$

$5 \times 0 =$

$4 \times 5 =$

$1 \times 5 =$

$5 \times 2 =$

$5 \times 9 =$

$6 \times 5 =$

$10 \times 5 =$

$5 \times 11 =$

$3 \times 5 =$

$5 \times 4 =$

$5 \times 5 =$

$5 \times 1 =$

$5 \times 7 =$

$8 \times 5 =$

$9 \times 5 =$

$12 \times 5 =$

$2 \times 5 =$



## FACT CAR RALLY RACE

## MIXED X5

Name: \_\_\_\_\_

Date: \_\_\_\_\_

$5 \times 6 =$

$5 \times 5 =$

$11 \times 5 =$

$5 \times 3 =$

$5 \times 8 =$

$7 \times 5 =$

$5 \times 12 =$

$5 \times 10 =$

$5 \times 0 =$

$4 \times 5 =$

$1 \times 5 =$

$5 \times 2 =$

$5 \times 9 =$

$6 \times 5 =$

$10 \times 5 =$

$5 \times 11 =$

$3 \times 5 =$

$5 \times 4 =$

$5 \times 5 =$

$5 \times 1 =$

$5 \times 7 =$

$8 \times 5 =$

$9 \times 5 =$

$12 \times 5 =$

$2 \times 5 =$

## ADD SIX PRACTICE LAPS



**+6**

$3 + 6 =$	$10 + 6 =$	$6 + 4 =$	$8 + 6 =$	$0 + 6 =$
$4 + 6 =$	$6 + 2 =$	$6 + 9 =$	$6 + 10 =$	$6 + 5 =$
$11 + 6 =$	$6 + 3 =$	$12 + 6 =$	$6 + 11 =$	$6 + 6 =$
$6 + 1 =$	$6 + 6 =$	$1 + 6 =$	$7 + 6 =$	$8 + 6 =$
$9 + 6 =$	$7 + 6 =$	$6 + 0 =$	$2 + 6 =$	$6 + 5 =$

## ADD SIX PRACTICE LAPS



**+6**

$3 + 6 =$	$6 + 4 =$	$6 + 9 =$	$6 + 11 =$	$6 + 3 =$
$9 + 6 =$	$7 + 6 =$	$6 + 1 =$	$2 + 6 =$	$6 + 5 =$
$5 + 6 =$	$10 + 6 =$	$6 + 4 =$	$8 + 6 =$	$0 + 6 =$
$6 + 0 =$	$6 + 7 =$	$1 + 6 =$	$6 + 6 =$	$8 + 6 =$
$11 + 6 =$	$6 + 2 =$	$12 + 6 =$	$6 + 11 =$	$6 + 6 =$

## ADD SIX PRACTICE LAPS



**+6**

$10 + 6 =$	$6 + 2 =$	$12 + 6 =$	$6 + 11 =$	$6 + 6 =$
$4 + 6 =$	$6 + 3 =$	$6 + 8 =$	$6 + 9 =$	$6 + 5 =$
$6 + 0 =$	$5 + 6 =$	$1 + 6 =$	$7 + 6 =$	$8 + 6 =$
$9 + 6 =$	$8 + 6 =$	$6 + 7 =$	$2 + 6 =$	$6 + 1 =$
$3 + 6 =$	$10 + 6 =$	$6 + 4 =$	$8 + 6 =$	$0 + 6 =$

# FACT CAR RALLY RACE SCORE SHEETS

Use these sheets to track progress. You needn't keep track of specific results (such as 18/20 or 80%). Simply put a check or a star when a student successfully completes a level.

If students are *repeating* the race—that is, going through a second time—  
block in the given square.

For gradebook purposes, it's suggested you track the percentage of completed levels versus the expected rate. For example, if your goal is to have students complete the first twelve tests by the end of the first grading term, you'd calculate number of completed levels out of twelve.

For free fillable **Excel versions** of the scores sheets, or to see a **video clip** of Fact Car Rally being implemented, visit [MackLewis.com](http://MackLewis.com) or [ReadAloudPlays.com](http://ReadAloudPlays.com)

**DIVISION**



	2	3	4	5	6	7	8	9	10	11	12		
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
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