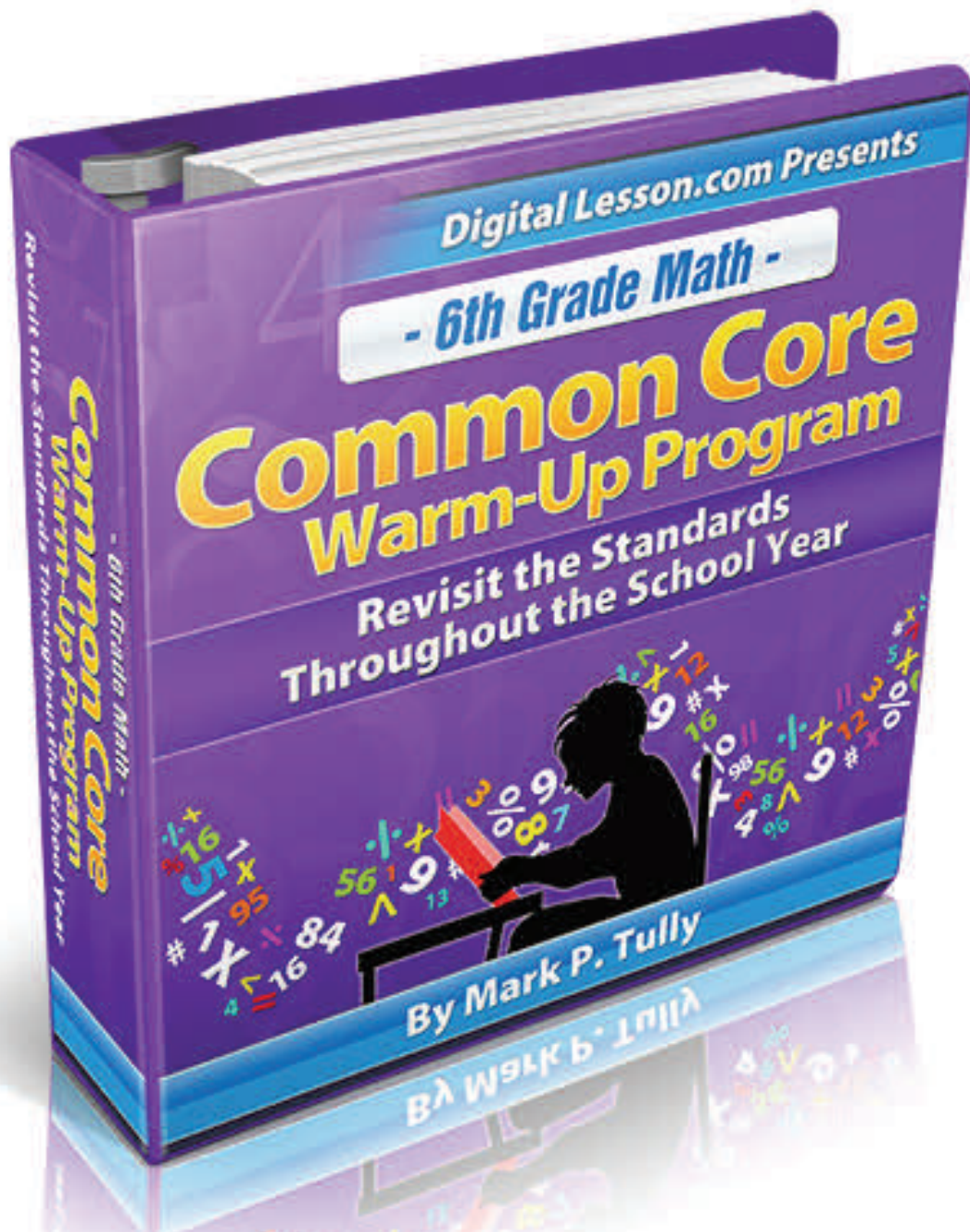


6th Grade Math

Common Core Warm-Up Program

Preview Pages

These preview pages include full teacher introduction, implementation suggestions, Common Core Standards correlation sample pages, and 11 Warm-Up pages from the 6th grade program.

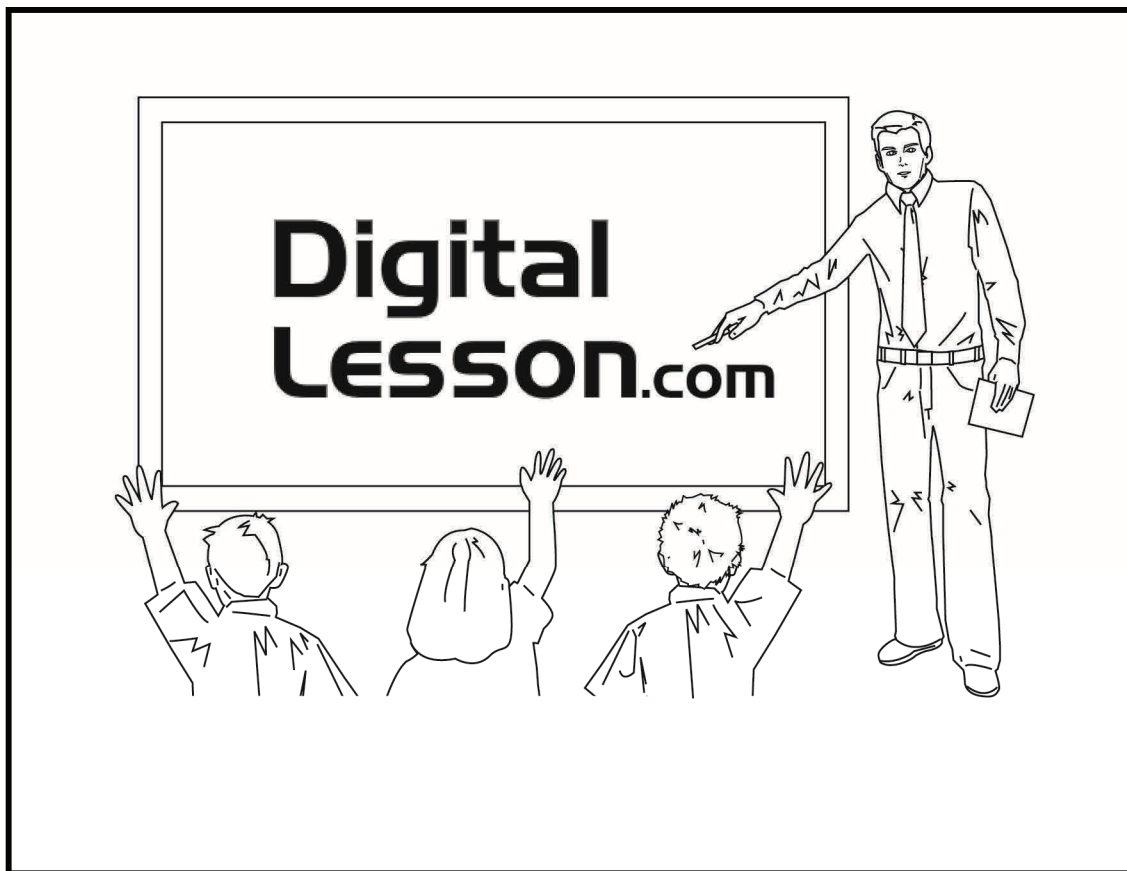


Mark P. Tully

6th Grade Math

Common Core

Warm-Up Program



120 Warm-Ups to Begin Your Math Class

Revisit the Standards Throughout the School Year

Reinforce Learning through Repetition

Sharpen Student Skills to Facilitate Problem Solving

6th Grade Math Common Core Warm-Up Program

License Agreement

A license to use the warm-ups contained in the [*6th Grade Math Common Core Warm-Up Program*](#) is hereby granted to the purchaser of this eBook. This license allows the teacher/user to display the warm-ups to students using an overhead projector or document camera. Other methods of sharing the warm-ups with students are also permitted for licensed teachers.

However, teachers/users may not share the *6th Grade Math Common Core Warm-Up Program* with teachers who are not licensed to use this resource. This eBook should not be shared with others via email or posted to any website. Unlicensed teachers or others are strictly prohibited from using this warm-up program in any form.

For more information on purchasing a license for the *6th Grade Math Common Core Warm-Up Program* please visit our website at www.DigitalLesson.com or email mark@digitallesson.com.

Thank you,

Mark Tully

Founder, DigitalLesson.com

Mark Tully is a mathematics teacher at Oak Middle School in the Los Alamitos Unified School District, Los Alamitos, California. He has been teaching for more than 25 years and during that time has served as Mathematics Department Chairman and as a Mathematics Mentor Teacher. He enjoys developing activities that are designed to present the prescribed mathematics curriculum and standards in a way that is active and engaging.

Mark's website, www.DigitalLesson.com, is designed to meet the needs of middle school math teachers. DigitalLesson.com specializes in providing instant downloads of engaging, hands-on math activities. These middle school math activities are designed to enhance the middle school math program. Also included on the site are other math resources tailored for the middle school math teacher.

Mark also publishes the *Middle School Math Treasures* newsletter. The newsletter includes resources, ideas, and activities for middle school math teachers. A subscription to *Middle School Math Treasures* is free! Sign up on the home page of DigitalLesson.com. Unsubscribe at any time. We will never rent or sell your e-mail address. Enjoy this great, free resource!

We would love to hear about your experiences using this book, [6th Grade Math Common Core Warm-Up Program](#) in your classroom. Please e-mail us with any comments at mark@digitallesson.com.

A publication of [Digital Lesson.com](http://DigitalLesson.com)

© Copyright 2013 by Mark Tully. All rights reserved. Limited reproduction permission. Rights are hereby granted to the individual purchasers of this book to reproduce the blackline masters as needed for use with their own students. Reproduction for other teachers, an entire school district, or for commercial use is prohibited.

6th Grade Math Common Core Warm-Up Program

Table of Contents

Teacher Introduction to the Common Core Warm-Up Program.....	6
Implementing the Program in Your Classroom.....	8
Sample Student Warm-Up Recording Sheet.....	11
Student Warm-Up Recording Sheet.....	12
List of Common Core Standards Covered in Each Warm-Up.....	13
List of Warm-Ups Where Each Standard is Covered.....	16
Warm-up Program Answer Keys.....	19
6th Grade Math Common Core Warm-Ups (1-120).....	24
(Click on bookmarks in this pdf eBook for easy access to any warm-up)	
Additional Resources Available at DigitalLesson.com.....	144

6th Grade Math Common Core Warm-Up Program

Teacher Introduction (p. 1)

Why a Math Warm-Up Program?

I have used several math warm-up programs in my classroom over the past few years and I believe that **they have played a significant role in the achievement of my math students**. I'll get into more detail below, but here is a list of the key benefits that I have experienced when using a warm-up program:

- * warm-ups set the tone for a productive math class period
- * warm-ups give me the opportunity to quickly pre-teach or review important math concepts
- * warm-ups create multiple opportunities for students to learn each concept throughout the year
- * warm-ups can increase student performance on mathematical tasks and tests that have math skills as their foundation

Repetition and experience are keys to learning. Think of the strong mathematical foundation that your students will build as they continuously review key 6th grade concepts in this Common Core Warm-Up Program.

Setting the Tone for a Productive Math Class Period

When my students enter my classroom they find 5 warm-up problems projected on the screen at the front of the classroom. I have trained my students to quiet down when the bell rings, copy down their homework assignment, and then begin their warm-up problems. This calming, systematic start to each day becomes familiar to students and maximizes effective instructional time in the classroom.

Repeated Opportunities for Students to Learn

A few years ago I was involved in a discussion with my principal about how we could improve student performance in math. I told her that to me this was NOT a mystery. **If students were given the opportunity to practice the key skills in their grade level a number of times during the school year, their retention and ability to use these concepts would dramatically increase.** My principal then informed me that we had purchased a set of warm-ups that would help us accomplish our goal.

Too often (before I used warm-ups) students were taught a linear progression of grade level skills during the year and then we held a multi-day “cram session” where we reviewed the most important skills again before our end of the year assessments. This method proved to be **not nearly as effective as regular warm-up problems**. Regular warm-up problems often expose students to the key grade level concepts 5-10 times (or more) during the course of the school year. The results of this consistent program of review were noteworthy.

6th Grade Math Common Core Warm-Up Program

Teacher Introduction (p. 2)

The Results of Using Daily Warm-Ups in the Math Classroom

The year that we purchased the warm-up program we were only able to complete 50-60 of the daily warm-ups because we started a few months into the school year. Still, our 7th grade math state test results showed the biggest increase out of any subject and grade level in our school. While my conclusion is based solely on observation (and I know that there are other factors involved) my colleagues and I are certain that **repeated exposures to the key content standards** in 7th grade **made a significant difference** in our results.

The following year our 6th grade team (I teach both grade levels) created our own set of warm-ups because a commercial product like the one we used in 7th grade was not available to us. We experienced similar results of significant improvement by our 6th grade students on the state mathematics test that year.

To me it is simply common sense that students will better understand ratios, expressions and equations, statistics, and many other topics when they are given **multiple opportunities to learn each concept throughout the school year.**

The Common Core State Standards for 6th Grade Math

With the vast majority of states having adopted the Common Core State Standards for Mathematics, how will skill-based warm-ups fit in with these new standards? I believe that students will always need a strong skill set in order to approach the problem solving tasks and activities that are part of the Common Core.

Based on my experiences as a teacher for over 25 years, **I have developed this 6th Grade Math Common Core Warm-Up Program to both implement and help support the Common Core State Standards.**

Each of the 120 warm-up pages in this book has 5 problems aligned with the Common Core State Standards for 6th grade math. It is **my goal that this warm-up program will help propel your 6th grade math students to success in math** this year and for years to come.

Implementing this Warm-Up Program in Your Classroom

In the **pages that follow** I will give you a step-by-step description of how I implement a warm-up program in my classroom. As always, these are ideas and suggestions based on my experience. **As a math teacher you should absolutely modify any procedures so that they work most effectively for you and your classroom.**

6th Grade Math Common Core Warm-Up Program

Implementing the Program in Your Classroom (p. 1)

1) Students Complete the Five Daily Warm-Up Problems (5-8 minutes)

When students enter the classroom they see a warm-up projected on the front screen. They complete the problems to the best of their ability, **showing their work on the warm-up recording sheet provided with this program**. After 5-8 minutes we review the answers, even if not every student has finished. Students **number the problems** and **show either work or the original problem** on their recording sheet.

2) Checking the Warm-Up Problems (2-4 minutes)

Student Participation

When I review the answers to the warm-ups I keep track of who answers each question by putting a tally mark on my seating chart. That way I ensure that everyone participates in this activity over the course of time. I call on a student and ask that student to share their answer and then, if appropriate, explain how they solved the problem. Some problems are straight computation and do not require an explanation.

Distributing Tickets

As an incentive for answering questions I select a student and give them 6 tickets to distribute. Five are for the students that correctly answer and explain the warm-up problems and 1 is to be kept by the student who distributes the tickets. Students receiving a ticket (from a basic roll of tickets that I purchase from Staples) put their name on the back and place the ticket in a class-specific can at the back of the classroom. Every 3-4 weeks I hold ticket drawings where I select 10-20 tickets and give away treats, school passes, homework passes, and any other prizes that I can get my hands on. I mention this at Back-to-School Night and parents will often donate items for our ticket drawings.

Teaching Mini Lessons

As we review the math problems I often teach small mini-lessons. We discuss any problems that are previews of lessons that have not yet been taught as well as those problems that review or apply previously covered concepts. I realize that these short explanations will not be grasped by every student. However, a number of students will better understand after the explanation and will be more prepared for similar problems in the future. Remember, this warm-up program is not taught for immediate mastery of every concept. Rather, multiple exposures to the mathematics will help lead students to mastery.

Answer Key Abbreviations Due to Limited Space

- * Property answers are abbreviated so “Commutative +” means Commutative Property of Addition.
- * Dot (line) plot information is given although the actual drawing is not included due to space limitations.
- * Box (and whisker) plots are not drawn but can easily be explained as the key numbers are given.
- * Answers for graphing inequality problems such as $x < 3$ are given as “open dot, to left.”

6th Grade Math Common Core Warm-Up Program

Implementing the Program in Your Classroom (p. 2)

3) Warm-Up Corrections

Students do the warm-up problems in pencil and correct them in colored pencil or ink on their Student Warm-Up Recording Sheet. They show work for each problem and place the answers in the answer column.

As we correct and discuss the problems students are instructed to show corrections (in color) next to each problem that they have missed. In my class, a correction is not just copying the correct answer in color next to their incorrect answer in the answer column. I require that students actually show the work (calculations, drawings, explanations, etc.) for any missed problems next to their original work.

4) Grading Warm-Ups

At the end of each five-day warm-up period I collect the students' recording sheets. In giving the students credit for their work and assigning a grade I am less concerned with their actual score and more concerned with student learning. With this in mind I consider three things before assigning a grade.

First, I check to make sure that students have shown some kind of work on every problem. On simple problems this may just be writing the problem down. On other problems this may mean showing the calculations involved in determining an answer.

Secondly, I monitor student corrections. As mentioned above, I require students to correct (in color) each and every problem that they miss. This is their opportunity for learning. As such, students who do not complete their corrections do not receive full credit. Corrections should include the work associated with arriving at the correct answer, not simply copying down the right answer when it is read aloud in class.

Thirdly, I look at the neatness and completeness of the paper. There are places on the recording sheet for the day, date, warm-up number, score, work, answers, and heading. If the paper is not filled out completely then the student will not receive full credit.

I count warm-ups as part of the homework grade in my classroom. Once again, I want to re-emphasize the point that I am more concerned with student learning during the warm-up process than I am with how many problems they get correct each day. If students miss problems but learn from their mistakes (and show their corrections) they can still receive full credit on the assignment.

Sometimes I use exceptional Student Warm-Up Recording Sheets as examples to help students understand the kind of work that I expect.

Finally, do not be overwhelmed by the prospect of grading several class sets of warm-ups. I quickly scan a paper for work, corrections, and completeness. I also notice how many problems they answered correctly out of the total. I can usually grade a class set of 35 papers in about 10 minutes.

6th Grade Math Common Core Warm-Up Program

Implementing the Program in Your Classroom (p. 3)

Additional Tips for Implementation

Navigation - There are **two main ways to navigate to the warm-up page that you will be using on a given day**. One option is to use the **bookmarks function** on this pdf file. Just click on the link for a given warm-up to be directed to that page. The second option is to simply **add 23 to the scheduled warm-up number** to find the correct page in this eBook. For example, to access Warm-up # 50 go to page 73.

Absences - Absent students are instructed to write “absent” on their recording sheet for any days that they miss school. No makeups are given on warm-ups.

Show Work - Work is required to be shown on all problems. For those problems that can be solved mentally, students should, at a minimum, write down the problem given.

Projection Tips - The warm-ups can be projected onto a screen directly from the pdf using a projector or by using physical copies of the warm-ups and a document camera. To keep the projection large enough it may be necessary to scroll down the page or slide the physical copy beneath the document camera. In such cases instruct students to complete the top two problems (problems #1 and #4) because they will not be visible if the warm-up needs to be repositioned.

No Calculators - This warm-up program is designed to be done without calculators. Required calculations are within the reasonable ability range for the students.

Encourage Drawings - Certain types of problems (coordinate plane problems, etc.) can best be solved by quickly sketching or drawing a picture to help find the answer. Encourage drawing as a strategy.

Time Period - The warm-ups and their work are completed on a recording sheet that has room for 5 warm-ups. Although I am very consistent in using warm-ups, I do not give warm-ups every single day. Sometimes there is a test or other assignment that requires the entire class period and so no warm-up is given on that day. Do not feel that warm-ups need to start on a Monday and end on a Friday. I start a new warm-up sheet when needed whether that is on a Monday or any other day of the week.

New Problem Types - As mentioned previously, I do not expect students to answer every problem correctly, especially when new concepts are introduced. I briefly explain the new concept and move on. Some students will understand the first time and others will understand with further repetition.

120 Warm-ups - I have never finished 120 warm-ups in one school year even though our school year has about 180 days. The reasons for this include days without warm-ups (tests, projects, assemblies, etc.) as well as days at the beginning and end of the school year where I do not use warm-ups because we are either in intro mode or windup mode. In addition, I like to mix in other starter activities every now and then. If you do end up needing more than 120 warm-ups my suggestion would be to cycle back around and choose some of the warm-ups to rework. Your students will not have these problems memorized and so they will continue to provide an effective review of 6th grade math concepts.

Math 6

LAST, FIRST

Warm-Ups

(Sample Page)

MATH, PERIOD 2

Common Core Review

10/12/18

MONDAY

10/12

Warm-Up # 26

4 / 5

1) 53

2) \$12.45

1) Show work or problem 2) Show work or problem 3) Show work or problem 4) Show work or problem 5) Show work or problem

3) 32 IN.²

4) $X \geq 5$

5) 3,284

Warm-Up # _____ / 5

(REMEMBER TO CORRECT ALL MISSED PROBLEMS IN COLOR.)

1) _____

2) _____

3) _____

4) _____

5) _____

Warm-Up # _____ / 5

(NUMBER YOUR WORK)

1) _____

2) _____

3) _____

4) _____

5) _____

Warm-Up # _____ / 5

1) _____

2) _____

3) _____

4) _____

5) _____

Warm-Up # _____ / 5

1) _____

2) _____

3) _____

4) _____

5) _____

Warm-Up Page Score 22 / 25

Math 6

Warm-Ups

Common Core Review

_____ Warm-Up # _____ / 5
1) _____
2) _____
3) _____
4) _____
5) _____

_____ Warm-Up # _____ / 5
1) _____
2) _____
3) _____
4) _____
5) _____

_____ Warm-Up # _____ / 5
1) _____
2) _____
3) _____
4) _____
5) _____

_____ Warm-Up # _____ / 5
1) _____
2) _____
3) _____
4) _____
5) _____

_____ Warm-Up # _____ / 5
1) _____
2) _____
3) _____
4) _____
5) _____

Warm-Up Page Score _____ / _____

6th Grade Math Common Core Warm-Up Program

Common Core State Standards Correlation by Warm-Up (1-56)

- 1) 6. RP. 1, 6.NS.2, 6.RP.2, 6.NS.1, 6.NS.4
- 2) 6. RP.3a, 6.NS.3, 6.RP.2, 6.RP.3c, 6.NS.2
- 3) 6.NS.3, 6.NS.1, 6.NS.7a, 6.NS.5, 6.RP.3c
- 4) 6.RP.3b, 6.RP.3d, 6.NS.6b, 6.RP.3c, 6.NS.1
- 5) 6.EE.1, 6.EE.3, 6.G.1, 6.RP.2, 6.NS.4
- 6) 6.NS.6c, 6.EE.1, 6.EE.8, 6.SP.5c, 6.RP.2
- 7) 6.NS.2, 6.NS.4, 6.RP.3b, 6.EE.6, 6.G.1
- 8) 6.NS.7c, 6.NS.4, 6.NS.3, 6.EE.2c, 6.RP.3b
- 9) 6.EE.2c, 6.RP.3d, 6.NS.3, 6.RP.3b, 6.NS.8
- 10) 6.EE.1, 6.EE.5, 6.NS.8, 6.RP.1, 6.NS.8
- 11) 6.EE.1, 6.EE.1, 6.SP.5c, 6.NS.1, 6.EE.8
- 12) 6.EE.2c, 6.NS.1, 6.RP.3d, 6.NS.5, 6.EE.1
- 13) 6.NS.4, 6.NS.6b, 6.EE.2a, 6.EE.8, 6.G.1
- 14) 6.NS.3, 6.NS.4, 6.EE.3, 6.EE.8, 6.G.2
- 15) 6.NS.6a, 6.NS.7c, 6.RP.3b, 6.NS.8, 6.NS.5
- 16) 6.NS.1, 6.EE.2c, 6.NS.7d, 6.EE.3, 6.G.3
- 17) 6.NS.3, 6.NS.7b, 6.EE.2c, 6.EE.2c, 6.EE.9
- 18) 6.NS.1, 6.NS.6b, 6.EE.3, 6.G.1, 6.SP.5c
- 19) 6.NS.2, 6.RP.1, 6.RP.3d, 6.NS.3, 6.EE.9
- 20) 6.EE.1, 6.EE.5, 6.NS.1, 6.RP.3c, 6.EE.9
- 21) 6.NS.6a, 6.NS.7b, 6.EE.4, 6.G.1, 6.SP.5c
- 22) 6.NS.1, 6.NS.3, 6.EE.5, 6.G.2, 6.NS.4
- 23) 6.NS.3, 6.NS.4, 6.RP.1, 6.NS.8, 6.EE.9
- 24) 6.NS.4, 6.EE.3, 6.NS.3, 6.EE.8, 6.G.1
- 25) 6.EE.1, 6.NS.4, 6.EE.4, 6.EE.8, 6.G.1
- 26) 6.NS.1, 6.EE.5, 6.NS.8, 6.NS.7b, 6.RP.2
- 27) 6.EE.2c, 6.EE.3, 6.NS.5, 6.SP.5c, 6.G.1
- 28) 6.NS.3, 6.RP.3c, 6.NS.3, 6.EE.8, 6.G.2
- 29) 6.NS.2, 6.RP.3d, 6.EE.4, 6.EE.2b, 6.EE.6
- 30) 6.NS.2, 6.EE.3, 6.NS.4, 6.EE.2b, 6.EE.9
- 31) 6.NS.3, 6.EE.7, 6.RP.2, 6.SP.4, 6.NS.8
- 32) 6.NS.3, 6.EE.5, 6.RP.1, 6.RP.3c, 6.EE.8
- 33) 6.NS.7c, 6.EE.1, 6.NS.3, 6.EE.8, 6.G.1
- 34) 6.NS.2, 6.EE.2a, 6.NS.6c, 6.EE.8, 6.EE.9
- 35) 6.NS.2, 6.NS.4, 6.RP.3b, 6.G.1, 6.SP.5c
- 36) 6.NS.1, 6.NS.1, 6.RP.3d, 6.EE.8, 6.RP.3a
- 37) 6.NS.2, 6.EE.3, 6.NS.5, 6.NS.8, 6.EE.9
- 38) 6.NS.2, 6.EE.2a, 6.NS.4, 6.NS.8, 6.EE.9
- 39) 6.NS.1, 6.NS.4, 6.NS.6b, 6.RP.3c, 6.EE.4
- 40) 6.EE.1, 6.NS.6b, 6.EE.2b, 6.EE.8, 6.G.1
- 41) 6.EE.1, 6.EE.5, 6.G.1, 6.G.3, 6.SP.5c
- 42) 6.EE.1, 6.EE.2c, 6.NS.8, 6.G.2, 6.EE.6
- 43) 6.NS.2, 6.EE.2c, 6.NS.8, 6.EE.8, 6.G.1
- 44) 6.NS.3, 6.EE.5, 6.RP.1, 6.NS.7a, 6.G.3
- 45) 6.EE.1, 6.EE.2c, 6.SP.5c, 6.EE.8, 6.G.1
- 46) 6.NS.2, 6.EE.2a, 6.NS.5, 6.RP.2, 6.SP.4
- 47) 6.NS.4, 6.EE.5, 6.EE.3, 6.NS.6c, 6.RP.3a
- 48) 6.NS.2, 6.EE.2c, 6.EE.2b, 6.G.2, 6.SP.5c
- 49) 6.NS.6a, 6.EE.1, 6.EE.8, 6.SP.4, 6.G.1
- 50) 6.NS.7c, 6.NS.4, 6.RP.3c, 6.NS.2, 6.NS.8
- 51) 6.NS.1, 6.NS.6b, 6.RP.1, 6.EE.1, 6.NS.4
- 52) 6.RP.3c, 6.EE.3, 6.G.1, 6.EE.2b, 6.NS.8
- 53) 6.EE.5, 6.NS.4, 6.RP.3d, 6.EE.8, 6.G.3
- 54) 6.NS.3, 6.NS.4, 6.NS.7b, 6.EE.5, 6.EE.9
- 55) 6.NS.6a, 6.EE.2a, 6.NS.8, 6.SP.5c, 6.G.1
- 56) 6.NS.3, 6.EE.2a, 6.NS.3, 6.NS.6b, 6.RP.3b

6th Grade Math Common Core Warm-Up Program

List of Warm-ups Where Each Standard is Covered (1 of 3)

Ratios and Proportional Relationships (6.RP)

6.RP.1: 1, 10, 19, 23, 32, 44, 51, 59, 68, 74, 81, 83, 96, 99, 111

6.RP.2: 1, 2, 5, 6, 26, 31, 46, 57, 63, 72, 85, 87, 94, 97, 112, 116

6.RP.3

6.RP.3a: 2, 36, 47, 61, 64, 77, 90, 91, 93, 96

6.RP.3b: 4, 7, 8, 9, 15, 35, 56, 67, 76, 79, 100, 101, 106, 114

6.RP.3c: 2, 3, 4, 20, 28, 32, 39, 50, 52, 59, 65, 70, 73, 76, 89, 94, 102, 113, 118

6.RP.3d: 4, 9, 12, 19, 29, 36, 53, 67, 80, 95, 103

The Number System (6.NS)

6.NS.1: 1, 3, 4, 11, 12, 16, 18, 20, 22, 26, 36, 39, 51, 60, 61, 64, 67, 82, 83, 86, 89, 97, 111, 116, 119

6.NS.2: 1, 2, 7, 19, 29, 30, 34, 35, 37, 38, 43, 46, 48, 50, 58, 66, 69, 79, 80, 86, 90, 91, 94, 99, 104, 107, 112, 114

6.NS.3: 2, 3, 8, 9, 14, 17, 19, 22, 23, 24, 28, 31, 32, 33, 44, 54, 56, 57, 60, 61, 63, 65, 68, 71, 73, 74, 75, 77, 89, 92, 93, 95, 99, 105, 109, 110, 113, 115, 117

6.NS.4: 1, 5, 7, 8, 13, 14, 22, 23, 24, 25, 30, 35, 38, 39, 47, 50, 51, 53, 54, 65, 68, 70, 71, 72, 76, 88, 90, 97, 100, 101, 103, 112, 114, 117, 120

6.NS.5: 3, 12, 15, 27, 37, 46, 58, 62, 63, 73, 81, 86, 94, 108, 116

6.NS.6

6.NS.6a: 15, 21, 49, 55, 87, 102

6.NS.6b: 4, 13, 18, 39, 40, 51, 56, 62, 63, 67, 72, 81, 84, 88, 91, 92, 96, 100, 101, 105, 110, 113, 115, 119, 120

6.NS.6c: 6, 34, 47, 59, 70, 99

6.NS.7

6.NS.7a: 3, 44, 71, 103, 119

6.NS.7b: 17, 21, 26, 54, 65, 91, 104

6.NS.7c: 8, 15, 33, 50, 70, 78, 84, 98, 106

6.NS.7d: 16, 76

6.NS.8: 9, 10, 15, 23, 26, 31, 37, 38, 42, 43, 50, 52, 55, 57, 62, 68, 69, 73, 78, 81, 85, 97, 98, 109, 113, 118

6th Grade Math Common Core Warm-Up Program

Common Core State Standards Warm-Up Answers (1-28)

- | | | | | | |
|-----|----------------------|-----------------------------------|-------------------------|--|-------------------------|
| 1) | 1) $\frac{2}{3}$ | 2) 420 | 3) 21pgs./hr. | 4) 15 days | 5) June 22nd |
| 2) | 1) $x = 20$ | 2) 146.443 | 3) 15 | 4) \$105.00 | 5) 1 $\frac{1}{2}$ bars |
| 3) | 1) 1,600,000 | 2) $\frac{3}{17}$ | 3) $<$ | 4) 753 ft. | 5) 16 slices |
| 4) | 1) \$12.50 | 2) 66 in. | 3) 4th quadrant | 4) \$48.00 | 5) 8 cars |
| 5) | 1) 64 | 2) Commutative + | 3) 20 in.^2 | 4) 2 pgs./hr. | 5) 14 in. x 14 in. |
| 6) | 1) -8.5 | 2) 0.0064 | 3) $s \leq 65$ | 4) 17 | 5) 24 miles |
| 7) | 1) 241 | 2) 24 | 3) \$1.05/qt. | 4) $2t + 3.75$ | 5) \$240.00 |
| 8) | 1) 17 | 2) 62.5 | 3) 8 | 4) \$50.00 | 5) 2 cents |
| 9) | 1) 90 | 2) 1 $\frac{1}{4}$ lbs. | 3) 35.48 | 4) 8 hr. 45 min. | 5) 9 units |
| 10) | 1) $\frac{1}{27}$ | 2) $x = 3$ | 3) (5,-3) | 4) 1 : 5 | 5) 24 units |
| 11) | 1) 1 | 2) 7^8 | 3) 7 | 4) 20 people | 5) $h \geq 48$ |
| 12) | 1) -12 | 2) 1 $\frac{1}{5}$ | 3) 3,200 oz. | 4) \$11.50 | 5) $25x^2$ |
| 13) | 1) 1,2,3,4,6,8,12,24 | 2) 3rd quad. | 3) $7x$ | 4) open dot, to right | 5) 584 ft.^2 |
| 14) | 1) 19.24 | 2) 8,16,24,32,40 | 3) Associative + | 4) closed dot, to left | 5) 189 ft.^3 |
| 15) | 1) 7 | 2) 27 | 3) 23 mi./gal. | 4) 11 units | 5) -52 ft. |
| 16) | 1) $\frac{5}{6}$ | 2) 32 | 3) increased by \$15 | 4) $8x + 32$ | 5) isosceles triangle |
| 17) | 1) 51.2 | 2) $-5 > -8$ | 3) 60 | 4) \$19.00 | 5) $y = 3x + 4$ |
| 18) | 1) 18 | 2) 2nd quadrant | 3) distributive | 4) 40 cm^2 | 5) 28 |
| 19) | 1) yes | 2) 5 : 2 | 3) 3 $\frac{1}{2}$ tons | 4) \$44.25 | 5) 0, 3, 250 |
| 20) | 1) 81 | 2) yes | 3) 1 $\frac{3}{4}$ ft. | 4) \$200.00 | 5) $y = 2x - 3$ |
| 21) | 1) -5 | 2) $\frac{1}{5}$, 22%, .25, .251 | 3) $9x + 5y$ | 4) 27.04 in.^2 | 5) 17 points |
| 22) | 1) 1 $\frac{1}{2}$ | 2) 60 | 3) no | 4) $l = 6 \text{ ft.}$ | 5) $4(9 + 2)$ |
| 23) | 1) 61.062 | 2) 12 | 3) 5 : 3 | 4) (-7,-3) | 5) $y = 5x + 1$ |
| 24) | 1) 1,2,4,8,16,32 | 2) Identity x | 3) 320,000 | 4) $x \geq -7$ | 5) 220 in.^2 |
| 25) | 1) 1 | 2) 12,24,36,48,60 | 3) $7x + 2y + 2$ | 4) $x > 9$ | 5) 96 ft.^2 |
| 26) | 1) 7 | 2) $x = 7$ | 3) 11 units | 4) $\frac{3}{4}$, 0.78, $\frac{4}{5}$, 81% | 5) 161 pages |
| 27) | 1) 16 | 2) Commutative x | 3) -34°F | 4) 23.5 | 5) 32 in.^2 |
| 28) | 1) 24.192 | 2) \$35.00 | 3) 5 | 4) open dot, to left | 5) 120 ft.^3 |

Warm-Up 3

1) Estimate the product by rounding each number to its greatest place value.

$$2,342.7 \times 784.3 =$$

6.NS.3

4) What is the difference in elevation between High Point (673 feet above sea level) and Low Point (80 feet below sea level)?

6.NS.5

2) What is the reciprocal of $5 \frac{2}{3}$?

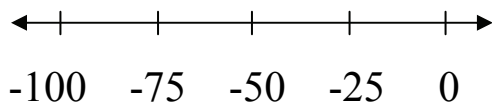
6.NS.1

5) George ate 4 slices of pizza. If this was 25% of the slices at the dinner table, how many slices were at the table to start with?

6.RP.3c

3) Solve the inequality.

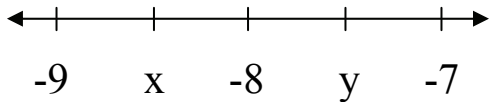
$$-100 \text{ _____ } -75$$



6.NS.7a

Warm-Up 6

1) What is the value of point x?



6.NS.6c

4) Jasmine took four 20 point quizzes in her math class. If her scores were 18, 15, 20, and 15, what was her mean quiz score?

6.SP.5c

2) $(.08)^2 =$

6.EE.1

5) If Ralph ran 15 miles in 5 days how far would he be expected to run in 8 days?

6.RP.2

3) Let s = the speed limit. Write an inequality to show that the maximum speed limit is 65 miles per hour.

6.EE.8

Warm-Up 21

<p>1) $- -5 =$</p> <p>6.NS.6a</p>	<p>4) What is the area of a square that has a side length of 5.2 inches?</p> <p>6.G.1</p>
<p>2) Order these numbers from least to greatest: 0.25, $\frac{1}{5}$, 22%, and 0.251.</p> <p>6.NS.7b</p>	<p>5) Rafael's goal is to average 20 points per game in his basketball league. He has scored 24, 18, 25, and 16 points in his first four games. How many points will he need to score in game 5 to end up with a mean score of exactly 20?</p> <p>6.SP.5c</p>
<p>3) Simplify the expression by combining like terms: $3x + 4y + y - 2x + 8x$</p> <p>6.EE.4</p>	

Warm-Up 34

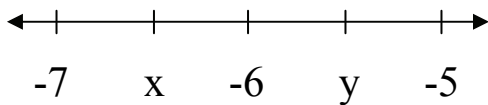
1) Is 87,234 divisible by 5?

6.NS.2

2) Write the expression for “the sum of x and 12.”

6.EE.2a

3) What is the value of point y ?



6.NS.6c

4) Find the area of the rectangle below.

2.5 in.



5.5 in.

6.EE.8

5) In the equation $d = 65t$, d represents the total distance travelled and t represents the number of hours travelled. The speed, in miles per hour, is 65. Complete the table below.

t	d
2	
	325
10	

6.EE.9

Warm-Up 45

1) $(1/2)^5 =$

6.EE.1

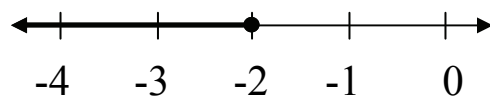
2) $25 + 5^2 (3) - 2(6) =$

6.EE.2c

3) Find the median of the data. 18, 9, 31, 52, 7, 1, 8

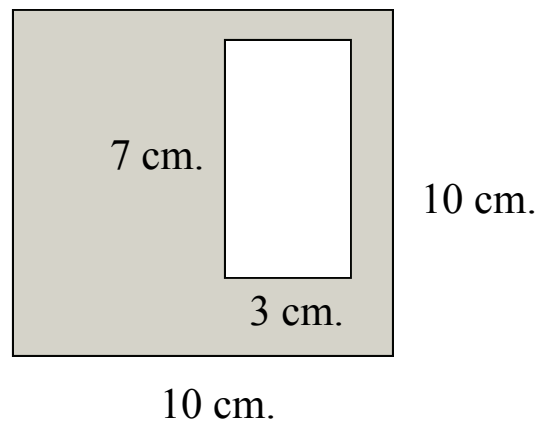
6.SP.5c

4) Using x as the variable, write the inequality graphed on the number line.



6.EE.8

5) Find the area of the shaded region.



6.G.1

Warm-Up 52

1) What is 75% of 160?

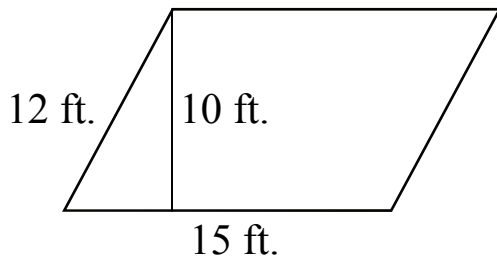
6.RP.3c

2) Name the property shown.

$$(9 + 4) + 7 = 9 + (4 + 7)$$

6.EE.3

3) Find the area of the parallelogram.



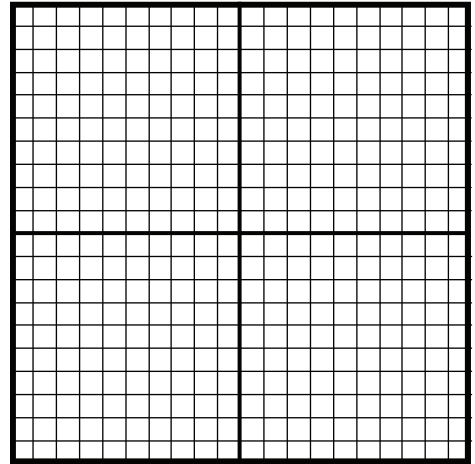
6.G.1

4) Identify the coefficients in the following expression.

$$-7x + 8y - 3z + y - 9$$

6.EE.2b

5) Find the area of a rectangle with points at $(-8,5)$, $(2,5)$, $(2,-3)$ and $(-8,-3)$.



6.NS.8

Warm-Up 77

1) $64 + 56.84 + 32.873 =$

6.NS.3

2) Write an expression for the number of eggs in x dozen.

6.EE.6

3) Estimate the quotient using compatible numbers.

$61.32 \div 11.7 =$

6.NS.3

4) What is the height of a triangle if the base is 20 m and the area is 50 m^2 ?

6.G.1

5) The ratio of cats to dogs in a neighborhood is 4 to 3. Complete the table by finding the missing values.

Cats	Dogs
8	
	21
64	

6.RP.3a

Warm-Up 93

1) $5.28 (3.7) =$

6.NS.3

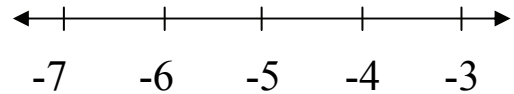
2) Write the expression for “the product of 8 and a number k.”

6.EE.2a

3) Find the missing number to make the ratios equivalent.
8 red marbles to 12 blue marbles, 10 red marbles to _____ blue marbles

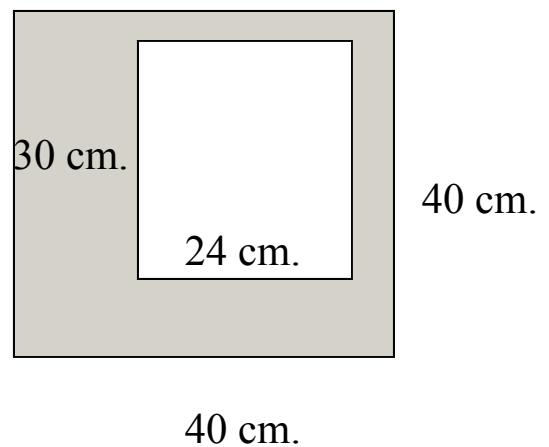
6.RP.3a

4) Graph the inequality $x > -5$.



6.EE.8

5) Find the area of the shaded region.



6.G.1

Warm-Up 105

1) $38.49 + 7.973 + 67 =$

6.NS.3

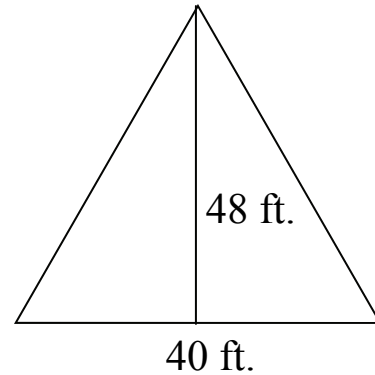
2) In which quadrant is the point $(2, -8)$ located?

6.NS.6b

3) Find the median in this data set: 24, 78, 99, 16, 32, 51 and 76.

6.SP.5c

4) Find the area of the triangle below.



6.G.1

5) John went to five hockey games and at each one he bought the exact same snacks for \$8.50. Let t = the price of a ticket. Write an expression to show how much money John spent at the five hockey games.

6.EE.6

Warm-Up 117

1) $8.64 \div (0.47) =$

6.NS.3

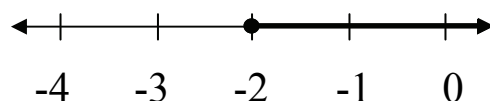
2) Find the least common multiple (LCM) of 7 and 12.

6.NS.4

3) Given three points located at $(-8,7)$, $(5,7)$, and $(-8,-9)$, find the coordinates for the point that will complete the rectangle.

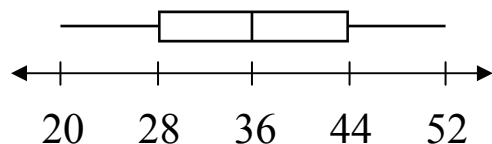
6.G.3

4) Using x as the variable, write the inequality graphed on the number line.



6.EE.8

5) Use the box plot below to find the interquartile range.



6.SP.5c

Warm-Up 119

1) $\frac{3}{4} \div \frac{9}{16} =$

6.NS.1

2) Evaluate the expression $4x^3 - 2x + 23$ when $x = 3$.

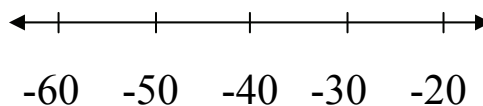
6.EE.2c

3) What point would be the reflection, across both the x and y axes, for the point $(8, -7)$?

6.NS.6b

4) Solve the inequality.

$$-42 \underline{\hspace{1cm}} -28$$



6.NS.7a

5) Write the equation for the function table below. (Use the form $y = mx + b$.)

X	Y
2	33
30	257
100	817

6.EE.9

6th Grade Math Common Core Warm-Up Program

Additional Resources Available at DigitalLesson.com

Including this math resource, here are the main eBooks available at DigitalLesson.com. Please follow the links for more information.

[6th Grade Math Common Core Warm-Up Program](#)

A set of 120 daily warm-ups designed to support and help implement the Common Core Math Standards.

[7th Grade Math Common Core Warm-Up Program](#)

A set of 120 daily warm-ups designed to support and help implement the Common Core Math Standards.

[Marvelous Middle School Math:](#)

[The Complete Collection of Lessons, Projects, and Games](#)

Infuse Life Into Your Curriculum and Energize Your Students with Powerful, Hands-On Math Activities Presented in a Meaningful Context. Includes 42 math lessons, projects, and games.

[Speed Skills Challenge Foundational Fluency Program](#)

Build Mathematical Fluency and Automaticity into Your Students That Will be Foundational to Their Success in Middle School Math. Includes 16 foundational skill modules for middle school math.

In addition, downloads of **smaller eBooks and individual lessons, projects, and games** designed specifically for middle school math teachers are available at DigitalLesson.com.

Join our free Middle School Math Treasures newsletter which includes links to some of our free printable resources and our video series. You will also receive middle school math updates and links to top web resources throughout the year. Simply enter your name and email on our website. You can unsubscribe at any time.

Wishing you inspiration and motivation to be the best math teacher you can be!

Mark P. Tully

Founder, DigitalLesson.com