

Program Components

Introduction

This guide introduces the program components available for digits © 2012—Savvas' new comprehensive middle school math program.

digits offers integrated instructional content designed to both optimize teachers' and students' time and to personalize learning. The digits program components are managed and delivered through Savvas' SuccessNet Plus platform.

Digital Content and Student Companion

The digits curriculum is delivered by way of digital content, combined with a write-in Student Companion.

Students learn with the digital content and then use their write-in Student Companions to record their responses and demonstrate mathematical understanding. Writing in their own books and recording their thinking gives students a sense of ownership in their learning.



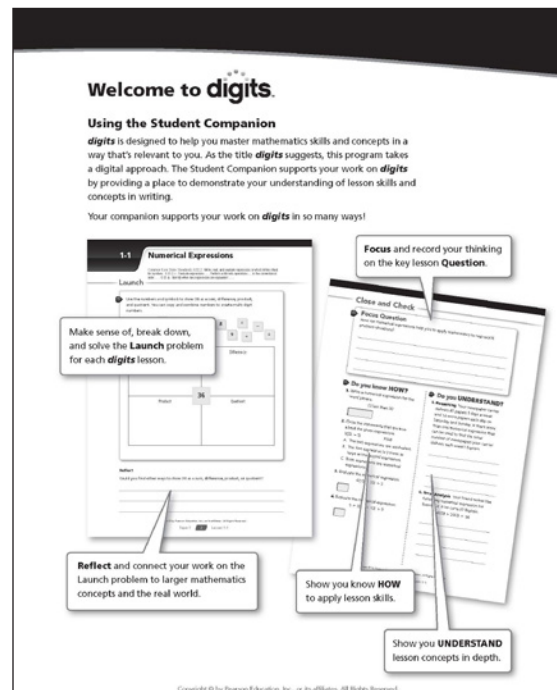
digits:
Grade 6



digits:
Grade 7



digits:
Grade 8



Teacher Package

The Teacher Package consists of the online digital content and the Resource Kit. The portal to the online digital content is located at the teacher site digitsDashboard.com.

The Resource Kit contains a Program Overview Guide, a DVD-ROM of the digital content, and five copies of the Student Homework Assignment CD-ROM.

Teacher Package	
digitsDashboard.com	
<input checked="" type="checkbox"/>	class lessons
<input checked="" type="checkbox"/>	lesson planning tools
<input checked="" type="checkbox"/>	student and assignment management tools
<input checked="" type="checkbox"/>	assessment and data management tools
<input checked="" type="checkbox"/>	automatic software updates <ul style="list-style-type: none">• performance improvements• feature enhancements
<input checked="" type="checkbox"/>	digital content updates <ul style="list-style-type: none">• state standards revisions• other revisions or additions
Resource Kit	
<input checked="" type="checkbox"/>	Program Overview Guide
<input checked="" type="checkbox"/>	Teacher Resources DVD-ROM <ul style="list-style-type: none">• class lessons• lesson plans• reproducible masters• answer keys
<input checked="" type="checkbox"/>	Student Homework Assignments CD-ROM (five copies)

digits Dashboard

digitsDashboard.com is the command central where teachers can find program support and access their digits course via SuccessNet Plus. Here, teachers can also view training tutorials and a link to CoCo, the digits Community Connection site. digits Dashboard is updated regularly with author messages, digits training, and helpful links.

Getting Started

digits Dashboard

Be sure to bookmark your digits dashboard url: www.digitsDashboard.com. Your digits dashboard is your command centre—where you can access digits help and support, view helpful training videos on MyPearsonTraining, and log in to your digits account. Check back often to view new helpful messages from our authors and links to resources.

1 Log in to digits using your assigned username and password, or register as a new user.

2 digits Overview Videos
Explore everything that digits has to offer.

3 CoCo
Access all support and resources at digits Community Connections.

4 MyPearson Training
Check out these teacher training videos.

5 digits Community
Reach out to other digits teachers.

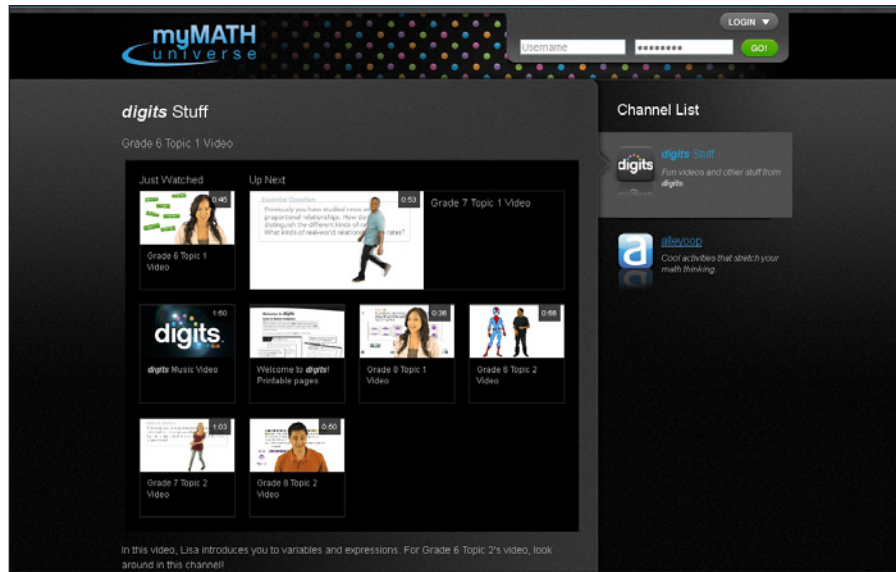
Student Package

The Student Package consists of the online digital content accessed through the student site, MyMathUniverse.com, and the write-in Student Companion.

Student Package	
MyMathUniverse.com	
<input checked="" type="checkbox"/>	class lessons
<input checked="" type="checkbox"/>	differentiated homework
<input checked="" type="checkbox"/>	personal study plan
<input checked="" type="checkbox"/>	automatic software updates <ul style="list-style-type: none">• performance improvements• feature enhancements
<input checked="" type="checkbox"/>	digital content updates <ul style="list-style-type: none">• state standards revisions• other revisions or additions
Write-in Student Companion	
<input checked="" type="checkbox"/>	two worktext pages per on-level lesson
<input checked="" type="checkbox"/>	annual printed content updates <ul style="list-style-type: none">• state standards revisions• other revisions or additions

My Math Universe

MyMathUniverse.com is a digits portal where students can watch entertaining videos about the math they are learning and log in to their student accounts on SuccessNet Plus.



SuccessNet Plus

After logging in to SuccessNet Plus, teachers can view the Table of Contents by clicking the digits course on the teacher home page. The Table of Contents displays a list of folders and icons that provide access to the program materials.

Table of Contents

The digits Table of Contents page is the starting point to access all classroom teaching materials. The folders and icons are color coded to represent On-Level, Readiness, Intervention, Enrichment, and Homework and Assessment resources. To open a folder and see the contents inside, click the plus sign next to the folder. To launch content indicated by an icon, click the item's name. Another option is to click the drop-down button, and then choose Preview from the Options drop-down menu.



Teacher Orientation

The Teacher Orientation folder contains a quick overview of the Table of Contents, a guide to common tasks for teachers, a downloadable version of the *Program Overview Guide*, and a technical manual for using the online platform.



Units

The Unit folders contain subfolders with the Readiness Assessment, Enrichment Support, and topics that are taught in that unit.



Topics

Topic folders are broken down further into a Readiness Lesson, on-level lessons, and topic tests.



Readiness Lesson

Readiness folders and files are indicated by purple icons and have an "r" before the lesson number. Each Readiness folder contains the following items:

- Readiness lessons
- Activity sheets
- Homework
- Teacher Guide
- Lesson Plan



On-Level Lesson

Each on-level lesson contains four parts.

Class Lesson

Click the lesson icon to open a new window that launches the on-level lesson.



Homework Files

Open the Homework folders to access MathXL for School homework files. The homework files consist of Homework and Mixed Review.



To launch the leveled Homework assignments, use the drop-down menu, and then choose between Level G and Level K in the Preview option. Level G homework is for on-level students. Level K homework consists of a reteaching assignment for students who work below grade level.

Printable homework PDFs are provided on the Teacher Resources DVD to support paper-based homework.

In Homework The online option for homework provides students with immediate feedback on their work. When students provide a correct answer, they receive a message telling them so. When they are incorrect, they get a hint about what they may be doing wrong. ▶

Exercise 3
0 correct | 0 of 11 complete

There are 65 calories in 1 serving of cereal. If a bowl holds 6 servings, how many calories are in the bowl?

There are cal.

Enter the correct this

There are 65 calories in 1 serving of cereal. If a bowl holds 6 servings, how many calories are in the bowl?

First read the problem statement carefully. Which of the following is the unknown quantity?

The number of calories in 1 serving of cereal

The number of servings of cereal in the bowl

The number of calories in the bowl

To find the number of calories in the bowl, multiply 6 by the number of calories for 1 serving.

$6 \times 65 \text{ calories} = \text{ } \text{ calories}$

Enter any number or expression in the edit field, then click Check Answer.

1 part remaining

Clear all Check Answer Done

Teacher Guide



The Teacher Guide provides pacing and instructional support before, during, and after the lesson. This guide opens as a PDF file.

Percents Less Than 1

LAUNCH (8 min)

Before

- How can the same number represent both 300% and 30%?

During

- Will the whole be larger for 300% or 30%? Explain.

After

- How could you use the three shaded squares to model?

PART 1 (8 min)

During the intro

- Suppose one penny is 0.1% of the total. How would you...

Dana Says (Screen 2) Use the Dana Says button to give...

While solving the problem

- Why isn't 0.5 equivalent?

After digging in

- Which of these required the most computation to categorize?
- If you knew $\frac{3}{10}$ were equivalent to $\frac{1}{2}$ %, how would the...

KEY CONCEPT (3 min)

- How do you know where to put the decimal point?

PART 2 (7 min)

Before solving the problem

- How do you know which number goes where in the percent?

Dana Says (Screen 1) Use the Dana Says button to post combined with basic number sense can be used to estimate...

While computing the percents

- What do you have to do to compute $\frac{1}{2}$ % of a number?

After computing the percents

- How did these three exercises differ?

PART 3 (8 min)

Before solving the problem

- Why would you want to know how much of West Virginia?
- How do you know what to solve for?

After solving the problem

- How can you use the given numbers in the problem to correct?

CLOSE AND CHECK (8 min)

- If you have to find a fractional percent of a positive number, is it less than, equal to, or greater than the original number?
- Describe a real-world situation in which you might encounter...

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Topic: Decimals and Percents

COMMON CORE STATE STANDARDS

- Domains:** The Number System; Ratios, Expressions and Equations
- Clusters:** Analyze proportional relationships and mathematical problems; apply an operations with fractions to add, subtract, solve real-life and mathematical problems involving expressions and equations.
- Standards:** 7.RP.3, 7.NS.2d, 7.NS.3

DOMAIN: The Number System

7.RP.3 Use proportional relationships to solve real-world problems.

7.NS.2d Apply properties of operations as numbers.

7.NS.3 Solve real-world and mathematical problems with rational numbers.

7.EE.3 Solve multi-step real-life and mathematical problems involving rational numbers in any form (who, using tools strategically). Apply properties of any form; convert between forms as appropriate answers using mental computation and estimation strategies.

Looking Back

Grade 6

6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

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Unit: Rational Numbers

PACING

Topic 4: Adding and Subtracting Rational Numbers

Readiness Assessment for Unit B	Single Period: 1 day	Block: $\frac{1}{2}$ day
Readiness Lesson	Single Period: 1 day	Block: $\frac{1}{2}$ day
Rational Numbers, Opposites, and Absolute Value	Single Period: 1 day	Block: $\frac{1}{2}$ day
Adding Integers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Adding Rational Numbers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Subtracting Integers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Subtracting Rational Numbers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Distance on a Number Line	Single Period: 1 day	Block: $\frac{1}{2}$ day
Problem Solving	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Review	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Assessment	Single Period: 1 day	Block: $\frac{1}{2}$ day
Total:	11 days	Total: 5 $\frac{1}{2}$ days

Topic 5: Multiplying and Dividing Rational Numbers

Readiness Lesson	Single Period: 1 day	Block: $\frac{1}{2}$ day
Multiplying Integers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Multiplying Rational Numbers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Dividing Integers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Dividing Rational Numbers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Operations with Rational Numbers	Single Period: 1 day	Block: $\frac{1}{2}$ day
Problem Solving	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Review	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Assessment	Single Period: 1 day	Block: $\frac{1}{2}$ day
Total:	9 days	Total: 4 $\frac{1}{2}$ days

Topic 6: Decimals and Percents

Readiness Lesson	Single Period: 1 day	Block: $\frac{1}{2}$ day
Repeating Decimals	Single Period: 1 day	Block: $\frac{1}{2}$ day
Terminating Decimals	Single Period: 1 day	Block: $\frac{1}{2}$ day
Percents Greater Than 100	Single Period: 1 day	Block: $\frac{1}{2}$ day
Percents Less Than 1	Single Period: 1 day	Block: $\frac{1}{2}$ day
Fractions, Decimals, and Percents	Single Period: 1 day	Block: $\frac{1}{2}$ day
Percent Error	Single Period: 1 day	Block: $\frac{1}{2}$ day
Problem Solving	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Review	Single Period: 1 day	Block: $\frac{1}{2}$ day
Topic Assessment	Single Period: 1 day	Block: $\frac{1}{2}$ day
Total:	10 days	Total: 5 days

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Lesson Plans



Click the Lesson Plans icon to open a complete editable lesson plan with suggested content and specifications. Lesson plans can be customized and converted to PDF files for printing.

CUSTOMIZE
Create PDF

1-3: Ratios With Fractions

Objectives

- Apply and extend previous understandings of equivalent ratios.

Lesson Links

- [1-3 Homework](#)
- [Lesson 1-3: Ratios With Fractions](#)

Overview/Materials

Essential Question for Topic
Previously you have studied rates and proportional relationships. How do you distinguish the different kinds of rates? What kinds of real-world relationships are rates?

Focus Question for Lesson
Previously you have written ratios as fractions. How can you write a ratio if at least one term is a fraction? How is this different from writing a ratio in which both terms are whole numbers?

Pacing

Standard
1 day

Block
1 half day

Standards

Code	Standard
MA_NA_MGM_2012_GR07_RP1	7.RP.1: Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.

Topic Tests

The Progress Monitoring folder contains the unit assessments. Students take the unit assessments online through MathXL for School or on paper using a printable PDF.



Progress Monitoring

The Progress Monitoring folder contains the unit assessments. Students take the unit assessments online through MathXL for School or on paper using a printable PDF.



Enrichment Support

The Enrichment Support folder contains unit-based enrichment projects that require students to demonstrate deeper understanding of the unit concepts through research and creativity. Each student enrichment activity includes a teacher support page. Enrichment activities provide challenges for accelerated students and can be assigned at any time in a unit.



Intervention

The Intervention folder contains full intervention lessons for Response to Intervention (RtI) support. Intervention folders and files are indicated by orange icons and have an "i" before the lesson icon.



Each Intervention folder contains the following items:

- Intervention lesson
- Journal pages
- Practice sets
- Journal with answers
- Teacher Guide
- Lesson Plan

The screenshot shows a web-based interface for a lesson check. At the top, it says "Examples Lesson Check" and "Part 1 Part 2 Part 3". Below that, a yellow warning bar states: "When you complete practice materials, the submission and grade are not saved." The main content area is titled "Example 1 Continued" and contains the instruction: "Place the points shown on the number line." Below the instruction is a number line from 0 to 3 with tick marks every 1/6. Above the number line, four fraction cards are shown: $1\frac{3}{6}$, $2\frac{3}{6}$, $1\frac{1}{6}$, and $2\frac{5}{6}$. Each card has a red dot above it. At the bottom of the interface, there are buttons for "Reset" and "Solution", and a "5 of 6" indicator.

Math Tools



Click the Math Tools icon to open a new window to view a list of the Math Tools. Math Tools for the digits program are virtual manipulatives that enable users to interact with, develop, and model math concepts on an interactive white board or computer.

Math Tools

Clicking on the **Math Tools** icon opens a new window with a list of the math tools.

Number Line	Coordinate Grapher
Place-Value Blocks	2-D Geometry
Area Models	3-D Geometry
Fractions & Percents	Data & Graphs
Integer Chips	Probability
Algebra Tiles	Grids & Organizers
Pan Balance	Calculator

Glossary



Click the Vocabulary icon to open the Vocabulary and Key Concepts (glossary) in a new window. The glossary contains a comprehensive list of all of the vocabulary in the digits course. When teachers access Vocabulary and Key Concepts within a lesson, the vocabulary of the specific lesson is presorted in a list.

Vocabulary and Key Concepts

Clicking on the **Vocabulary and Key Concepts** button opens a new window with the vocabulary and key concepts of the specific lesson that you are teaching pre-sorted in a list.

Spanish translation and other search options are built into the window. To review the vocabulary and key concepts from the previous lesson, simply select the lesson from the Lesson Vocabulary list.

1 Select English or Spanish

2 Select a term in the list to view the definition or explanation

3 Type or select a different term

4 Select a different lesson to view its vocabulary and key concepts

Technical Manual

The Technical Manual is a how-to guide to help teachers get started on the SuccessNet Plus platform.



Review

This guide introduced the online digital content and program components available for Savvas' new middle grades math program—digits © 2012.