

HOW TO NAVIGATE IN THE DYNAMIC TEACHING PACKAGE

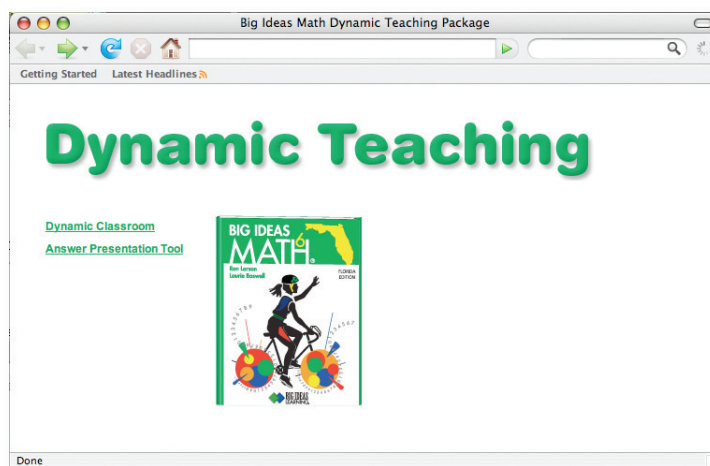
Goal: To navigate in the *Dynamic Teaching Package*

The steps show how to navigate through the *Dynamic Classroom* and the *Answer Presentation Tool*.

1

Start the *Dynamic Teaching Package* with a web browser or interactive white board.

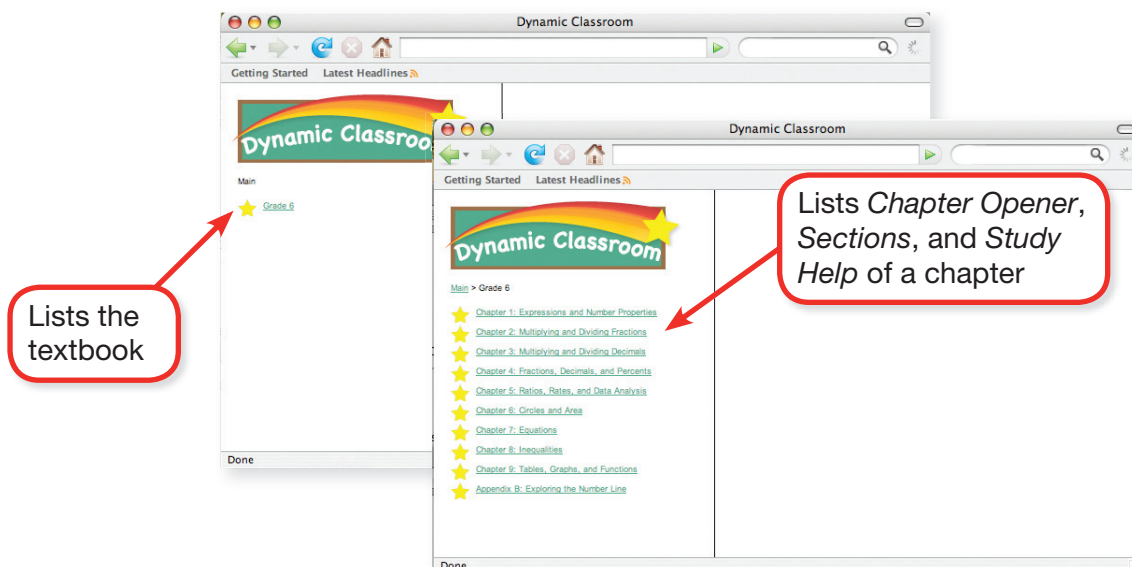
Two options are available: the *Dynamic Classroom* and the *Answer Presentation Tool*. Click **Dynamic Classroom**.



2

The screen is split into two frames. The left frame lists several menu items which allow you to navigate through the *Dynamic Classroom*. Choose a grade, chapter, and section from the left frame.

Click **Grade 6**. Then click **Chapter 4**. Finally, click **4.3 Comparing and Ordering Fractions, Decimals, and Percents**.



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The right frame displays the *Big Ideas Math* Pupil Edition and the left frame provides links to additional resources.

The screenshot shows the 'Dynamic Classroom' web application. The left sidebar contains a 'Dynamic Classroom' logo and a list of links: 'Main > Grade 6 > Chapter 4 > Section 3', 'Warmup 1 (with answers)', 'Warmup 2 (with answers)', 'Record and Practice Journal', 'Interactive Number Line', 'Extra Example 1', 'On Your Own 1-2 (with answers)', 'Extra Example 2', 'On Your Own 3 (with answers)', 'Extra Example 3', 'On Your Own 4 (with answers)', 'TE Exercise 31', 'Mini Assessment (with answers)', 'Closure 1 (with answers)', and 'Closure 2 (with answers)'. The main content area displays '4.3 Comparing and Ordering Fractions, Decimals, and Percents'. It includes an 'Essential Question' about ordering numbers, two activities ('Ordering Numbers' and 'Using Fractions, Decimals, and Percents'), and various mathematical examples and exercises. A red arrow points from the 'Main' link in the sidebar to the 'Main' text in the breadcrumb trail. Another red arrow points from the 'Scroll through the entire section.' callout to the right side of the main content area.

In the *Chapter Openers*, *Sections*, and *Study Helps*, the left frame will display links marked with yellow and red stars. Each link will display the listed information in a new window.

Scroll through the entire section.

4

Return to the main menu by clicking **Main**.

The screenshot shows the 'Dynamic Classroom' web application. The left sidebar contains a 'Dynamic Classroom' logo and a list of links: 'Main > Grade 6 > Chapter 4 > Section 3', 'Warmup 1 (with answers)', and 'Warmup 2 (with answers)'. The main content area displays '4.3 Comparing and Ordering Fractions, Decimals, and Percents'. A red arrow points from the 'Main' link in the sidebar to the 'Main' text in the breadcrumb trail.

Click here to return to the main menu shown in Step 2.

5

Close the *Dynamic Classroom*.



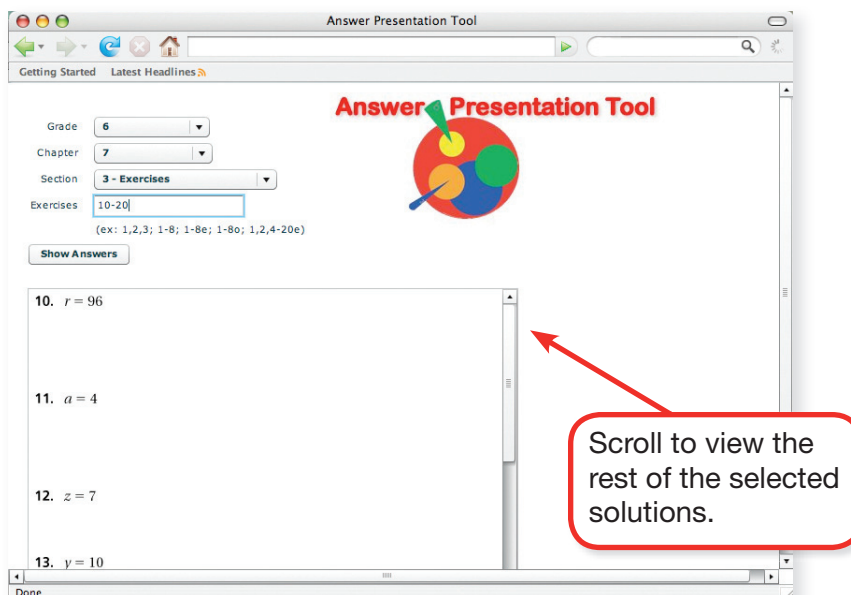
HOW TO NAVIGATE IN THE DYNAMIC TEACHING PACKAGE

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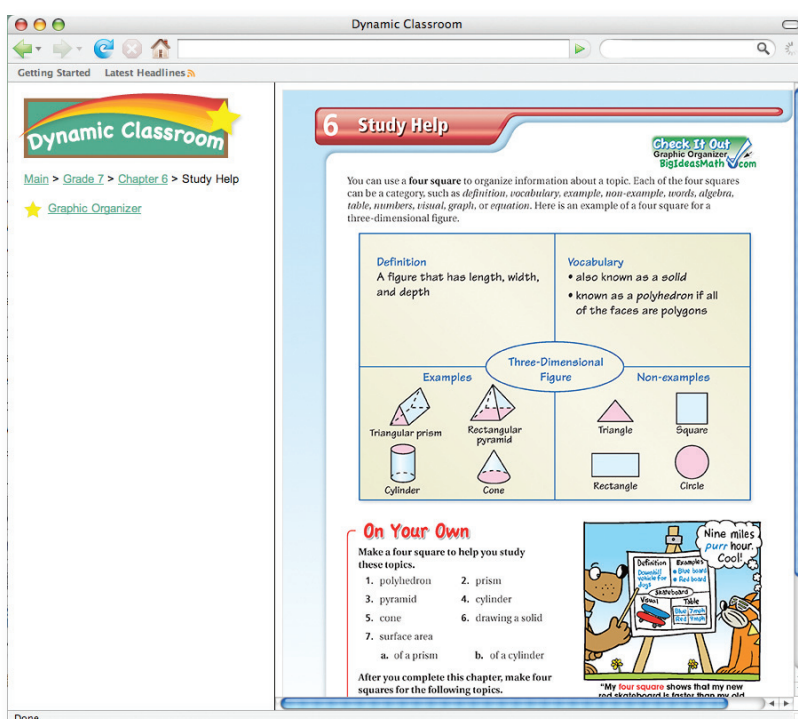
Return to the *Dynamic Teaching Package* as shown in Step 1. Click **Answer Presentation Tool**. Select a grade, chapter, section, and exercises to view solutions.

Select Grade **6**, Chapter **7**, and Section **3 – exercises**. Type in exercise numbers “10-20.” Click **Show Answers**.



On Your Own: Follow the steps to display a *Study Help* in the *Dynamic Teaching Package*.

- Start the *Dynamic Teaching Package*.
- Display the *Study Help* from Chapter 6 of Grade 7.



Goal: To show features of the *Dynamic Classroom*

1

Start the *Dynamic Classroom*. Click **Grade 6**. Then click **Chapter 2: Multiplying and Dividing Fractions**. Finally click **2.2 Multiplying Fractions and Whole Numbers**.

In the left frame, there are links represented with yellow and red stars. When you click a link with a yellow star, a new window will appear. Click **Warmup 1 (with answers)**.

When a link includes “(with answers),” you can view the answers in the same window by clicking near the exercises as shown below.

The screenshot shows the Dynamic Classroom interface. On the left is a sidebar with a list of links, some marked with yellow stars and others with red stars. A red callout box points to the links, stating: "Notice there are links for several features from the pupil and teaching editions of the textbook." The main content area displays a fraction problem: "Find the sum. 1. $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$ 2. $\frac{1}{6} + \frac{1}{6} + \frac{1}{6}$ 3. $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ 4. $\frac{2}{3} + \frac{2}{3} + \frac{2}{3}$ 5. $\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$ 6. $\frac{5}{6} + \frac{5}{6} + \frac{5}{6} + \frac{5}{6}$ ". A pop-up window titled "Warmup 1 (with answers)" is open, showing the same fraction problems and their solutions. The solutions are: 1. $\frac{3}{5}$, 2. $\frac{1}{2}$, 3. $\frac{1}{2}$, 4. 2 , 5. 3 , 6. 2 . The pop-up window also includes a diagram of a number line and a text box explaining the solution for problem 5: "Now, you need to think of a way to divide 3 into 4 equal parts. Because the length is divided into 4 equal sections, multiply the numerator and denominator by 4. In this form, you see that $\frac{12}{4}$ can be divided into four equal parts of $\frac{3}{4}$. Each part is $\frac{3}{4}$ gallon and you used three of them. Written as multiplication, you have $\frac{3}{4} \times 3 = \frac{9}{4}$. So, you used $\frac{9}{4}$ gallons of paint."

2

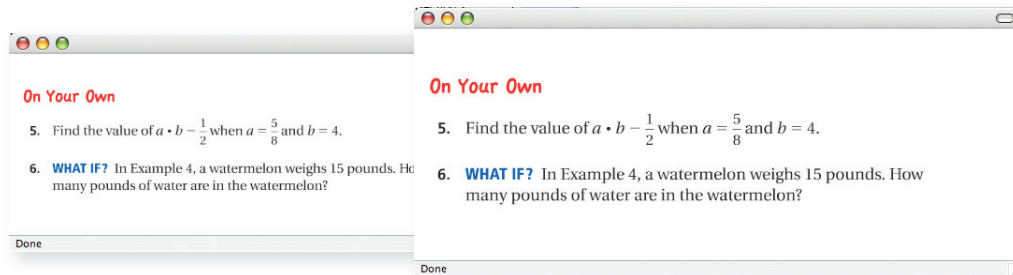
Close the *Warmup 1* window.

WHAT IS IN THE DYNAMIC CLASSROOM

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Each window can be resized to increase or decrease text and graphic sizes. Click **On Your Own 5-6 (with answers)**. Click and drag any corner of the window to resize.



4

Close the *On Your Own* window.

5

In the left frame, when you click a link with a red star, an interactive window will appear. Each interactive manipulative in the *Dynamic Classroom* has unique qualities and levels of interactivity.

Click **Interactive Fraction Bars**. The Fraction Bars manipulative allows you to divide a fraction bar into $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, and $\frac{1}{10}$ sections. You can enter fractions below the bar and move the shaded area to represent fractions on the bar.

WHAT IS IN THE DYNAMIC CLASSROOM

6 Close the *Interactive Fraction Bar* window.

7 You can display as many windows as you need when presenting material to students.

Click **Extra Example 1**, **Mini-Assessment (with answer)**, and **Closure 2 (with answer)**.

The screenshot displays the 'Dynamic Classroom' application with several windows open:

- Main Window:** Shows a sidebar with a 'Dynamic Classroom' logo and a list of activities: Warmup 1 (with answers), Warmup 2 (with answers), Record and Practice Journal, Interactive Fraction Bars, Interactive Number Line, Extra Example 1, Extra Example 2, On Your Own 1-4 (with answers), Extra Example 3, Extra Example 4, On Your Own 5-6 (with answers), TE Exercise 42, Mini Assessment (with answers), Closure 1 (with answers), and Closure 2 (with answers).
- Extra Example 1 Window:** Displays the problem 'Find $8 \times \frac{3}{5}$ '. It includes a 'STATE STANDARDS' section (MA.6.A.1.1, MA.6.A.1.2, MA.6.A.1.3, MA.6.A.5.3) and an 'EXAMPLE: Multiplying a Fraction and a Whole Number' section. The example text says: 'You have 3 gallons of paint. You use $\frac{3}{4}$ of it. How much paint did you use?' It provides a 'THINK ABOUT THE QUESTION' prompt and a 'Words' section: 'What is $\frac{3}{4}$ of 3?'. It then shows a solution: 'Here is one way to get the answer. Draw a length of 3. Because you want to find $\frac{3}{4}$ of the length, divide it into 4 equal sections. Now, you need to think of a way to rewrite the number 3 as a fraction. Because the length is divided into 4 equal sections, multiply the numerator and denominator by 4. In this form, you see that $\frac{12}{4}$ can be divided into four equal parts of $\frac{3}{4}$. Each part is $\frac{3}{4}$ gallon and you used three of those. Written as...'
- Mini-Assessment Window:** Displays the prompt 'Multiply. Write the answer in simplest form.' followed by five problems:
 - $2 \times \frac{1}{4} = \frac{1}{2}$
 - $4 \times \frac{5}{6} = 3\frac{1}{3}$
 - $\frac{3}{8} \times 12 = 4\frac{1}{2}$
 - $\frac{2}{5} \times 25 = 10$
 - Your friend has 36 DVDs and $\frac{2}{3}$ of them are comedies. How many DVDs are comedies? **24**
- Closure Window:** Displays the prompt 'Writing Prompt: If n is a whole number, explain how to multiply $n \cdot \frac{2}{5}$. Multiply n and 2 and then divide the product by 5.'

8 Close the windows and exit the *Dynamic Classroom*.

On Your Own: You can view and print pages from the *Record and Practice Journal*. The *Record and Practice Journal* is a print supplement that accompanies the pupil edition. The print supplement is available through the *Dynamic Classroom*.

- Start the *Dynamic Classroom*.
- Click **Grade 6**.
- Click **Chapter 2: Multiplying and Dividing Fractions**.
- Click **2.2 Multiplying Fractions and Whole Numbers**.
- Click **Record and Practice Journal**.
- Print pages 30 and 32.
- Close the *Record and Practice Journal*.
- Close the *Dynamic Classroom*.

Name _____ Date _____

2.2 Multiplying Fractions and Whole Numbers (continued)

2 EXAMPLE: Multiplying a Whole Number and a Fraction

Use the number line to find $4 \times \frac{2}{5}$. Describe your steps.

$4 \times \frac{2}{5} = \underline{\hspace{2cm}}$

Inductive Reasoning

Work with a partner. Complete the table using a number line.

Exercise	
1 $3 \times \frac{3}{4}$	
2 $4 \times \frac{2}{5}$	$\frac{2}{5}$
$5 \times \frac{7}{6}$	
$6 \times \frac{9}{5}$	
$7 \times \frac{1}{3}$	

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Record and Practice Journal

Name _____ Date _____

2.2 Practice
For use after Lesson 2.2

Multiply. Write the answer in simplest form.

1. $4 \times \frac{1}{9}$

2. $8 \times \frac{2}{5}$

3. $\frac{3}{8} \times 9$

4. $\frac{11}{2} \times 7$

5. $9 \times \frac{7}{9}$

6. $\frac{2}{3} \times 12$

Evaluate the expression when $x = 4$, $y = \frac{4}{15}$, and $z = 30$.

7. $\frac{5}{8} \cdot z$

8. $xy \cdot z$

9. $\frac{1}{2} + yz$

10. You design a shirt that requires $\frac{5}{6}$ yard of fabric. Four friends ask you to make them a shirt. How many yards of fabric do you need?

11. The table shows the amount of iced tea mix that is needed for each amount of water shown.

Iced tea mix	Water
1 1/2 tbsp	1 cup
2 tbsp	1 quart (4 cups)
1/4 cup	2 quarts (8 cups)
1/2 cup	1 gallon (4 quarts)

a. Give two possible ways to make 11 cups of iced tea.

b. How much mix will you need for each of your methods? Explain.

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Record and Practice Journal

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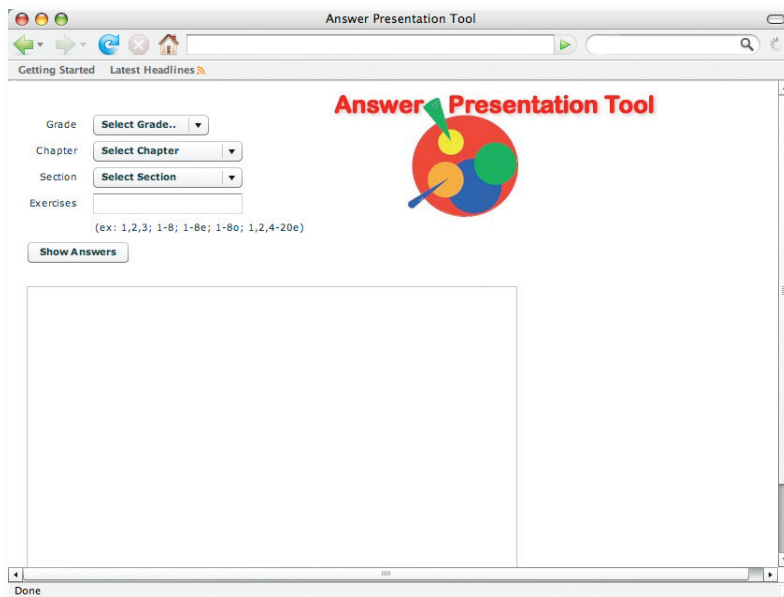
WHAT IS IN THE ANSWER PRESENTATION TOOL

Goal: To show features of the *Answer Presentation Tool*

The *Answer Presentation Tool* allows you to view the solution as well as the worked-out solution to any exercise in the text.

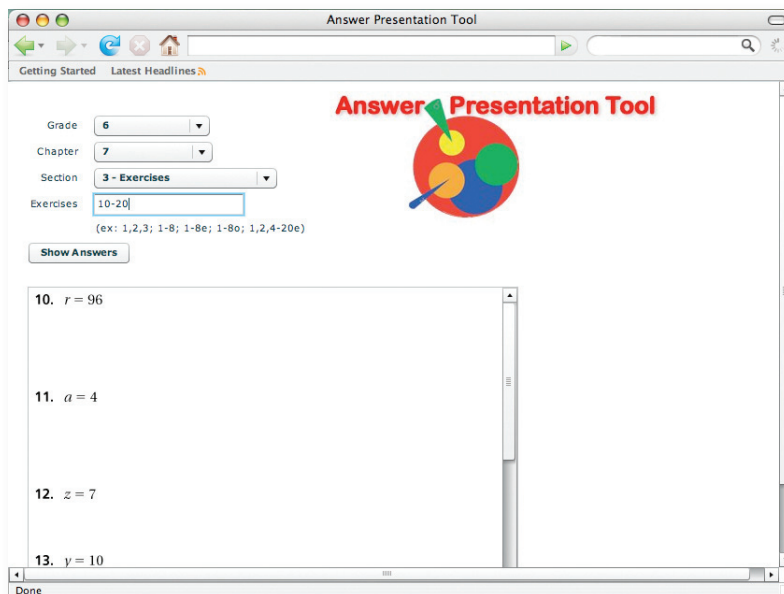
1

Start the *Answer Presentation Tool*.



2

Select a grade, chapter, section, and exercises. Select grade **6**, chapter **7**, and Section **3 – exercises**. Type in exercise numbers “10-20.” Click **Show Answers**.

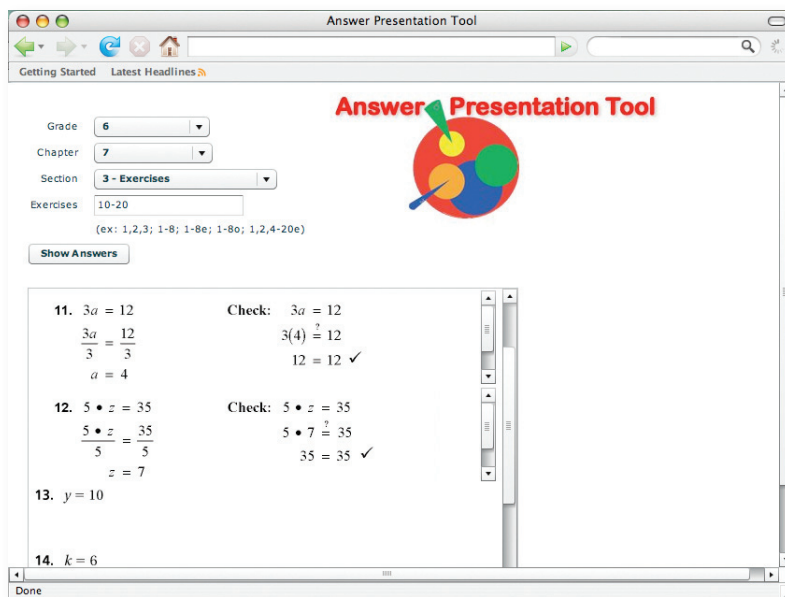


WHAT IS IN THE ANSWER PRESENTATION TOOL

3

To view a worked out solution, click on the exercise number to see the worked-out solution. You can view more than one worked-out solution at a time.

Click exercise numbers **11** and **12**.



On Your Own: View the worked-out solutions to a standardized test practice.

- Start the *Answer Presentation Tool*.
- Select grade **6**, chapter **7**, and section **Standardized Test Practice**. Type in exercises “1-20.” Click **Show Answers**.
- Click each answer to view the worked-out solutions.
- Close the *Answer Presentation Tool*.

