



Grade **6**

LOUISIANA

Math

LEAP2025 Practice

Updated for 2021-22



ONLINE

2 LEAP2025 Practice Tests

7 Question Types

30+ SKILLS

Important Instruction

Students, Parents, and Teachers can use the URL or QR code provided below to access two full-length Lumos LEAP practice tests. Please note that these assessments are provided in the Online format only.

URL

Visit the URL below and place the book access code

<http://www.lumoslearning.com/a/tedbooks>

Access Code: xxxx-xxxx

**This is a sample copy and not the full
version of the workbook**

INTRODUCTION

This book is specifically designed to improve student achievement on the Smarter Balanced Assessment Consortium (LEAP) Test. With over a decade of expertise in developing practice resources for standardized tests, Lumos Learning has designed the most efficient methodology to help students succeed on the state assessments (See Figure 1).

Lumos Smart Test Practice provides students LEAP assessment rehearsal along with an efficient pathway to overcome any standards proficiency gaps. Students perform at their best on standardized tests when they feel comfortable with the test content as well as the test format. Lumos online practice tests are meticulously designed to mirror the LEAP assessment. It adheres to the guidelines provided by the LEAP for the number of questions, standards, difficulty level, sessions, question types, and duration.

The process starts with students taking the online diagnostic assessment. This online diagnostic test will help assess students' proficiency levels in various standards.

After completion of the diagnostic assessment, students can take note of standards where they are not proficient. This step will help parents and educators in developing a targeted remedial study plan based on a student's proficiency gaps.

Once the targeted remedial study plan is in place, students can start practicing the lessons in this workbook that are focused on specific standards.

After the student completes the targeted remedial practice, the student should attempt the second on-line LEAP practice test. Record the proficiency levels in the second practice test to measure the student progress and identify any additional learning gaps. Further targeted practice can be planned to help students gain comprehensive skills mastery needed to ensure success on the state assessment.

Lumos Smart Test Prep Methodology

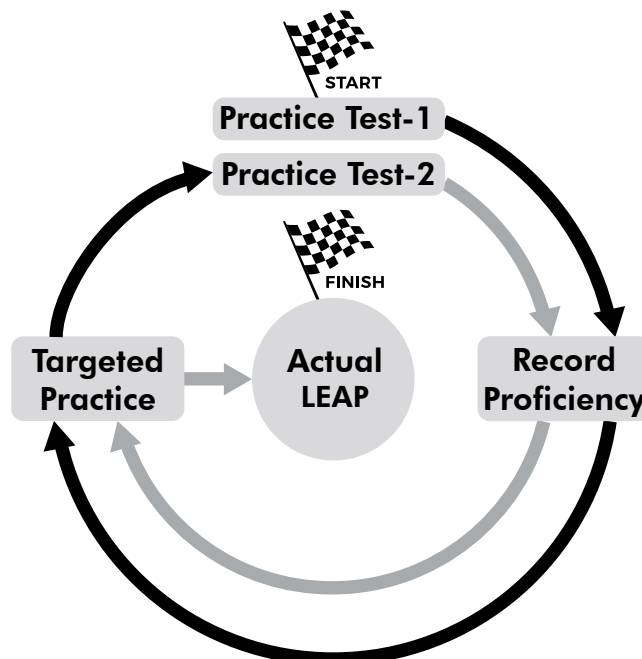


Figure 1

Table of Contents



Introduction	1
Chapter 1 Lumos Smart Test Prep Methodology	6
Chapter 2 Ratios & Proportional Relationships	10
Lesson 1 6.RPA.1 Expressing Ratios	10
Lesson 2 6.RPA.2 Unit Rates	15
Lesson 3 6.RPA.3 Solving Real World Ratio Problems	19
Lesson 4 6.RPA.3.B Solving Unit Rate Problems	23
Lesson 5 6.RPA.3.C Finding Percent	27
Lesson 6 6.RPA.3.D Measurement Conversion	31
Answer Key & Detailed Explanations	35
Chapter 3 The Number System	48
Lesson 1 6.NS.A.1 Division of Fractions	48
Lesson 2 6.NS.B.2 Division of Whole Numbers	53
Lesson 3 6.NS.B.3 Operations with Decimals	57
Lesson 4 6.NS.B.4 Using Common Factors	61
Lesson 5 6.NS.C.5 Positive and Negative Numbers	65
Lesson 6 6.NS.C.6.A Representing Negative Numbers	69
Lesson 7 6.NS.C.6.B Ordered Pairs	73
Lesson 8 6.NS.C.6.C Number Line & Coordinate Plane	79
Lesson 9 6.NS.C.7 Absolute Value	85
Lesson 10 6.NS.C.7.B Rational Numbers in Context	88
Lesson 11 6.NS.C.7.C Interpreting Absolute Value	93
Lesson 12 6.NS.C.7.D Comparisons of Absolute Value	97
Lesson 13 6.NS.C.8 Coordinate Plane	101
Answer Key & Detailed Explanations	107

Chapter 4	Expressions & Equations	130
Lesson 1	6.EE.A.1 Whole Number Exponents	130
Lesson 2	6.EE.A.2.A Expressions Involving Variables	133
Lesson 3	6.EE.A.2.B Identifying Expression Parts	136
Lesson 4	6.EE.A.2.C Evaluating Expressions	139
Lesson 5	6.EE.A.3 Writing Equivalent Expressions	143
Lesson 6	6.EE.A.4 Identifying Equivalent Expressions	146
Lesson 7	6.EE.B.5 Equations and Inequalities	150
Lesson 8	6.EE.B.6 Modeling with Expressions	154
Lesson 9	6.EE.B.7 Solving One-Step Equations	158
Lesson 10	6.EE.B.8 Representing Inequalities	162
Lesson 11	6.EE.C.9 Quantitative Relationships	166
	Answer Key & Detailed Explanations	170

Chapter 5	Geometry	188
Lesson 1	6.G.A.1 Area	188
Lesson 2	6.G.A.2 Surface Area and Volume	194
Lesson 3	6.G.A.3 Coordinate Geometry	198
Lesson 4	6.G.A.4 Nets	205
	Answer Key & Detailed Explanations	212

Chapter 6	Statistics & Probability	221
Lesson 1	6.SPA.1 Statistical Questions	221
Lesson 2	6.SPA.2 Distribution	226
Lesson 3	6.SPA.3 Central Tendency	231
Lesson 4	6.SP.B.4 Graphs & Charts	235
Lesson 5	6.SP.B.5 Data Interpretation	243
Lesson 6	6.SP.B.5.B Describing the Nature	248
Lesson 7	6.SP.B.5.C Context of Data Gathered	252
Lesson 8	6.SP.B.5.D Relating Data Distributions	256
	Answer Key & Detailed Explanations	262

Additional Information	286
LEAP FAQ	286
What if I buy more than one Lumos Study Program?	289
Lumos StepUp® Mobile App FAQ for Students	290
Lumos StepUp® Mobile App FAQ for Parents and Teachers	291
Progress Chart	292

Chapter 1

Lumos Smart Test Prep Methodology

Step 1: Access Online LEAP Practice Test

Use the URL and access code provided below or scan the QR code to access the first LEAP practice test to get started. The online LEAP practice test mirrors the actual Smarter Balanced assessments in number of questions, item types, test duration, test tools and more.

After completing the test, your student will receive immediate feedback with detailed reports on standards mastery. With this report, use the next section of the book to design a practice plan for your student.

URL

Visit the URL below and place the book access code

<http://www.lumoslearning.com/a/tedbooks>

Access Code: xxxxx-xxxxx-x

Step 2: Review the Personalized Study Plan Online

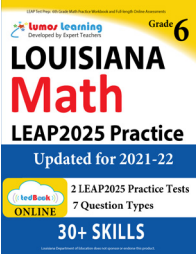
After student complete the online Practice Test 1, student can access their individualized study plan from the table of contents (Figure 2).


Parents and Teachers can also review the study plan through their Lumos account.

Lumos StepUp LEAP Online Practice and Assessments Grade 6 Math							
HOMEWORK							
Lesson Name		Total			Student		
		Questions	Total Points	Incorrect	Score	% Score	Pending
PT1	Practice Test I	4	4	3	1	25%	0
	CAT I	4	4	3	1	25%	
	PT I						

Study Plan

BACK COURSE
Lumos Smart Test Practice: Personalized Study Plan for Sam





EXPORT AS EXCEL

Lumos StepUp - LEAP Online Practice and Assessments - Grade 6 Math

Based on your performance in the online Practice Test 1, we recommend the following additional practice. Please use the related lessons in the Grade 6 LEAP Math practice book you purchased.

Upgrade to Full Program

50

90

Lesson Name	Standard Info	<input type="checkbox"/> Targeted practice status	Percentage Score
Ratios and Proportional Relationships			
Expressing Ratios	6.R.P.A.1	<input type="checkbox"/>	0% ●
Unit Rates	6.R.P.A.2	<input type="checkbox"/>	0% ●
Solving Real World Ratio Problems	6.R.P.A.3	<input type="checkbox"/>	0% ●

Step 3: Complete Targeted Practice

Using the information provided in the study plan report, complete the targeted practice using the appropriate lessons to overcome proficiency gaps. With lesson names included in the study plan, find the appropriate topics in this workbook and answer the questions provided. Students can refer to the answer key and detailed answers provided for each lesson to gain further understanding of the learning objective. Marking the completed lessons in the study plan after each practice session is recommended. (See Figure 3)

BACK COURSE Lumos Smart Test Practice: Personalized Study Plan for Sam

Lumos StepUp - LEAP Online Practice and Assessments - Grade 6 Math

Based on your performance in the online Practice Test 1, we recommend the following additional practice. Please use the related lessons in the Grade 6 LEAP Math practice book you purchased.

Upgrade to Full Program

50 90

EXPORT AS EXCEL

Lesson Name	Standard Info	<input type="checkbox"/> Targeted practice status	Percentage Score
Ratios and Proportional Relationships			
Expressing Ratios	6.R.P.A.1	<input checked="" type="checkbox"/>	0%
Unit Rates	6.R.P.A.2	<input checked="" type="checkbox"/>	0%
Solving Real World Ratio Problems	6.R.P.A.3	<input type="checkbox"/>	0%

Figure 3

Step 4: Access the Practice Test 2 Online

After completing the targeted practice in this workbook, students should attempt the second LEAP practice test online. Using the student login name and password, login to the Lumos website to complete the second practice test.

Step 5: Repeat Targeted Practice

Repeat the targeted practice as per Step 3 using the second study plan report for Practice test 2 after completion of the second LEAP rehearsal.



Name: _____

Date: _____

Chapter 2: Ratios & Proportional Relationships

Lesson 1: Expressing Ratios

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Expressing Ratios*.


Categories About 13 results (0.009 seconds)

- Pin (5)
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Basic ratios

Resource: Khan Academy
Standard: 6.RP.A.1
Grade: 6
Subject: Math

Topic Standard



ed Search **Expressing Ratios**

URL	QR Code
http://www.lumoslearning.com/a/6rpa1	



1. A school has an enrollment of 600 students. 330 of the students are girls. Express the fraction of students who are boys in simplest terms.
- (A) $\frac{12}{20}$
- (B) $\frac{11}{20}$
- (C) $\frac{9}{20}$
- (D) $\frac{13}{20}$
2. In the 14th century, the Sultan of Brunei noticed that his ratio of emeralds to rubies was the same as the ratio of diamonds to pearls. If he had 85 emeralds, 119 rubies, and 45 diamonds, how many pearls did he have?
- (A) 17
- (B) 22
- (C) 58
- (D) 63
3. Mr. Fullingham has 75 geese and 125 turkeys. What is the ratio of the number of geese to the total number of birds in simplest terms?
- (A) 75:200
- (B) 3:8
- (C) 125:200
- (D) 5:8
4. The little league team called the Hawks has 7 brunettes, 5 blonds, and 2 redheads. What is the ratio of redheads to the entire team in simplest terms?
- (A) 2:7
- (B) 2:5
- (C) 2:12
- (D) 1:7



Name: _____

Date: _____

5. The little league team called the Hawks has 7 brunettes, 5 blonds, and 2 redheads. The entire little league division that the Hawks belong to has the same ratio of redheads to everyone else. What is the total number of redheads in that division if the total number of players is 126?
- (A) 9
(B) 14
(C) 18
(D) 24
6. Barnaby decided to count the number of ducks and geese flying south for the winter. The first day he counted 175 ducks and 63 geese. What is the ratio of ducks to the total number of birds flying overhead in simplest terms?
- (A) 175:63
(B) 175:238
(C) 25:9
(D) 25:34
7. Barnaby decided to count the number of ducks and geese flying south for the winter. The first day he counted 175 ducks and 63 geese. By the end of migration, Barnaby had counted 4,725 geese. If the ratio of ducks to geese remained the same (175 to 63), how many ducks did he count?
- (A) 13,125
(B) 17,850
(C) 10,695
(D) 14,750
8. Barbara was baking a cake and could not find her tablespoon measure. The recipe calls for $3\frac{1}{3}$ tablespoons. Each table spoon measure 3 teaspoon. How many teaspoons must Barbara use in order to have the recipe turn out all right?
- (A) 3
(B) 6
(C) 9
(D) 10
9. The ratio of girls to boys in a grade is 6 to 5. If there are 24 girls in the grade then how many students are there altogether?
- (A) 14
(B) 24
(C) 34
(D) 44

Name: _____

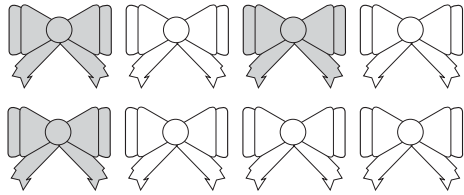
Date: _____



10. The ratio of pencils to pens in a box is 3 to 2. If there are 30 pencils and pens altogether, how many pencils are there?

- (A) 16
- (B) 17
- (C) 18
- (D) 19

11. Which of the following correctly expresses the ratio of shaded bows to the number of total bows? Select all answers that apply.



- (A) 3:8
- (B) 5:8
- (C) $\frac{3}{5}$
- (D) $\frac{3}{8}$
- (E) $\frac{5}{8}$

12. Write the ratio that correctly describes the number of white stars compared to the number of gray stars. Write your answer in the box below.





Name: _____

Date: _____

13. Complete the following table by filling in the blanks with a number that shows the correct ratio that is equivalent to the one shown in the first row.

1	2
2	4
	6
4	8
5	
	12

Name: _____

Date: _____



Chapter 2:

Ratios & Proportional Relationships

Answer Key

&

Detailed Explanations



Name: _____

Date: _____

Lesson 1: Expressing Ratios

Question No.	Answer	Detailed Explanations
1	C	First, to find the proper ratio, subtract the number of girls from the total number of students. The difference is the number of boys. $600 - 330 = 270$. So, the initial ratio is $\frac{270}{600}$. Then, to rewrite a ratio in its simplest terms, divide the numerator and denominator by the Greatest Common Factor (GCF). Here, the GCF is 30. 270 divided by $30 = 9$ and 600 divided by $30 = 20$, so, the simplest ratio is $\frac{9}{20}$.
2	D	First, find the ratio of emeralds to rubies. That ratio is $\frac{85}{119}$. To find how many pearls the sultan had, set up a proportion with the ratio of diamonds to pearls: $\frac{85}{119} = \frac{45}{x}$ Then, find the cross products of each: $85 * x = 119 * 45$ Simplify: $85x = 5355$ Solve for x by dividing by 85 on both sides: $\frac{85x}{85} = \frac{5355}{85}$ $x = 63$
3	B	$75 + 125 = 200$. Therefore, the total number of birds is 200. The ratio of geese to total birds is 75:200. Simplify the ratio by dividing by the GCF (75,200)= 25, simplified ratio is 3:8.
4	D	There are $(7+5+2) = 14$ players in all. The ratio of redheads to the team is 2:14. Divide by the GCF of 2 to simplify the ratio to 1:7
5	C	Set up the proportion: $\frac{2}{14} = \frac{x}{126}$, $\frac{1}{7} = \frac{x}{126}$, cross multiply to get $7x = 126$, then divide by 7 and $x = 18$.
6	D	The total number of birds is $175+63 = 238$. Thus, the ratio of ducks to total birds is 175:238. To find the ratio in simplest terms, divide by the GCF(175, 238) =7. The ratio in simplest terms is 25:34.
7	A	The ratio of ducks to geese is 175:63. To find how many ducks, set up a proportion of $\frac{175}{63} = \frac{x}{4,725}$. Find the cross products: $175 * 4,725 = 63 * x$ $826,875 = 63x$ Divide both sides by 63 $x = 13,125$
8	D	There are 3 teaspoons to each tablespoon. Thus $3 * \frac{10}{3} = 10$ teaspoons.



Question No.	Answer	Detailed Explanations												
9	D	To find how many students there are in the grade, set up the proportion $\frac{6}{5} = \frac{24}{x}$. Notice that you can multiply $\frac{6}{5}$ by $\frac{4}{4}$ to make the numerator of 24. This makes the equivalent denominator 20. Add $24 + 20$ to get the total number of students, or 44.												
10	C	If the ratio of pencils to pens is $\frac{3}{2}$ then the ratio of pencils to pencils and pens is $\frac{3}{5}$. To find the number of pencils in a box with 30 pencils and pens, set up the proportion $\frac{3}{5} = \frac{x}{30}$. Then, multiply the first ratio by $\frac{6}{6}$ which will equal $\frac{18}{30}$. There are 18 pencils in the box.												
11	A & D	Correct Response: 3:8 and $\frac{3}{8}$ There are 3 shaded bows and a total of 8 bows in all. 3:8 is the correct way to write a ratio or it can be written $\frac{3}{8}$, which is read "3 out of 8".												
12	4:5	4:5. There are 4 white stars and 5 gray stars.												
13		<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>8</td> </tr> <tr> <td>5</td> <td>10</td> </tr> <tr> <td>6</td> <td>12</td> </tr> </tbody> </table> <p>The numbers are 3, 6, 10. The first row shows the ratio pattern, which is 1:2, which means each number in the left column is $\frac{1}{2}$ of the number in the right column.</p>	1	2	2	4	3	6	4	8	5	10	6	12
1	2													
2	4													
3	6													
4	8													
5	10													
6	12													



Name: _____

Date: _____

Chapter 3: The Number System


Lesson 1: Division of Fractions


You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Division of Fractions*.


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Dividing Fractions and Mixed Numbers: 6.NS.A.1

 Resource: Pin

 **Division of Fractions**

URL	QR Code
http://www.lumoslearning.com/a/6nsa1	



1. What is the quotient of 20 divided by one-fourth?

- (A) 80
- (B) 24
- (C) 5
- (D) 15

2. Calculate: $1\frac{1}{2} \div \frac{3}{4} =$

- (A) 4
- (B) $\frac{1}{2}$
- (C) $\frac{3}{4}$
- (D) 2

3. Calculate: $3\frac{2}{3} \div 2\frac{1}{6} =$

- (A) $\frac{8}{13}$
- (B) $\frac{12}{13}$
- (C) $1\frac{5}{13}$
- (D) $1\frac{9}{13}$

4. Calculate: $2\frac{3}{4} \div \frac{11}{4} =$

- (A) 1
- (B) 2
- (C) 3
- (D) 4



Name: _____

Date: _____

5. Calculate: $\frac{7}{8} \div \frac{3}{4} =$

(A) $1\frac{1}{6}$

(B) 2

(C) $\frac{21}{32}$

(D) $\frac{5}{9}$

6. Calculate: $6\frac{3}{4} \div 1\frac{1}{8} =$

(A) $\frac{1}{6}$

(B) 4

(C) $5\frac{3}{4}$

(D) 6

7. Complete the following division using mental math.

7 divided by $\frac{1}{5}$

(A) 35

(B) $\frac{7}{5}$

(C) $\frac{5}{7}$

(D) $\frac{1}{35}$

Name: _____

Date: _____



8. Complete the following division using mental math.

11 divided by $\frac{6}{6}$

- Ⓐ $\frac{66}{66}$
- Ⓑ $\frac{1}{11}$
- Ⓒ 1
- Ⓓ 11

9. What is the result when a fraction is multiplied by its reciprocal?

- Ⓐ $\frac{1}{2}$
- Ⓑ 10
- Ⓒ 1
- Ⓓ It cannot be determined.

10. Simplify the following problem. Do not solve.

$$\frac{14}{21} \div \frac{28}{7}$$

- Ⓐ $\frac{14}{21} \div \frac{28}{7}$
- Ⓑ $\frac{2}{3} \times \frac{1}{4}$
- Ⓒ 1
- Ⓓ 10



Name: _____

Date: _____

11. Which of the following is equal to $1 \div \frac{3}{4}$? Circle the correct answer choice.

(A) $\frac{4}{3}$

(B) $\frac{2}{4}$

(C) $\frac{1}{3}$

12. Fill in the blank.

$$\frac{1}{2} \div 4 = \underline{\quad}?$$

13. Which of the following is equal to $\frac{7}{2} \div \frac{2}{6}$? Circle the correct answer choice.

(A) $\frac{9}{2}$

(B) $\frac{5}{4}$

(C) $\frac{42}{4}$

Name: _____

Date: _____



Chapter 3: The Number System

Answer Key & Detailed Explanations



Name: _____

Date: _____

Lesson 1: Division of Fractions

Question No.	Answer	Detailed Explanations
1	A	<p>The original problem is:</p> $\frac{20}{1} \div \frac{1}{4} =$ <p>To divide fractions, you must Keep (the first fraction), Change (the division to multiplication), and Flip (the second fraction, or, take the reciprocal).</p> $\frac{20}{1} \times \frac{4}{1} = \frac{80}{1} = 80$
2	D	<p>The original problem is:</p> $1\frac{1}{2} \div \frac{3}{4} =$ <p>First, find the improper fraction of the first mixed number (numerator = bottom times the side plus the top) = $[(2*1)+1]$, Fraction = $\frac{3}{2}$</p> <p>To divide fractions, you must keep (the first fraction), Change (the division to multiplication), Flip (the second fraction, or, take the reciprocal).</p> $\frac{3}{2} \times \frac{4}{3} = \frac{12}{6}$ <p>Simplify by factoring out the GCF of 6. The answer is $\frac{2}{1}$ or 2</p>
3	D	<p>The original problem is:</p> $3\frac{2}{3} \div 2\frac{1}{6} =$ <p>First, find the improper fraction of the first mixed number (numerator = bottom times the side plus the top) = $[(3*3)+2]$, Fraction = $\frac{11}{3}$</p> <p>. Then, find the improper fraction of the second mixed number (numerator = bottom times the side plus the top = $[(2*6)+1]$, Fraction = $\frac{13}{6}$</p> <p>To divide fractions, you must keep (the first fraction), Change (the division to multiplication), Flip (the second fraction, or, take the reciprocal).</p> $\frac{11}{3} \times \frac{6}{13} = \frac{66}{39}$ <p>Simplify by factoring out the GCF of 3.</p> <p>The answer is $\frac{22}{13}$</p> <p>Divide $\frac{22}{13}$ to get a mixed number: The answer is $1\frac{9}{13}$.</p>



Question No.	Answer	Detailed Explanation
4	A	<p>The original problem is:</p> $2\frac{3}{4} \div \frac{11}{4} =$ <p>First convert the mixed fraction into improper fraction by using Numerator of the improper fraction = denominator of mixed fraction x whole part of the mixed fraction + numerator of the mixed fraction whereas the denominator of the improper fraction is same as that of the mixed fraction.</p> $2\frac{3}{4} \div \frac{11}{4} = \frac{11}{4} \div \frac{11}{4} = 1$
5	A	<p>The original problem is:</p> $\frac{7}{8} \div \frac{3}{4} =$ <p>Division of fractions can be obtained by multiplying the dividend with the reciprocal of the divisor.</p> <p>Thus, $\frac{7}{8} \div \frac{3}{4} = \frac{7}{8} \times \frac{4}{3} = \frac{28}{24} = \frac{7}{6} = 1\frac{1}{6}$</p>
6	D	<p>The original problem is:</p> $6\frac{3}{4} \div 1\frac{1}{8} =$ <p>First convert the mixed fractions into improper fraction by using Numerator of the improper fraction = denominator of mixed fraction x whole part of the mixed fraction + numerator of the mixed fraction whereas the denominator of the improper fraction is same as that of the mixed fraction.</p> <p>So, $6\frac{3}{4} \div 1\frac{1}{8} = \frac{27}{4} \div \frac{8}{9}$</p> <p>Division of fractions can be obtained by multiplying the dividend with the reciprocal of the divisor.</p> <p>Thus, $\frac{27}{4} \div \frac{8}{9} = \frac{27}{4} \times \frac{9}{8}$</p> <p>Cross factor out the GCF of 4 from 4 and 8 Cross factor out the GCF of 9 from 9 and 27</p> $\frac{3}{1} \times \frac{2}{1} = 6$



Name: _____

Date: _____

Question No.	Answer	Detailed Explanation
7	A	To divide the fractions, you must Keep (the first fraction), Change (the division to multiplication), and Flip (the second fraction, or, take the reciprocal). The second fraction then reads $\frac{5}{1}$. Because $\frac{5}{1}$ is the same as 5, the problem simplifies to $7 \times 5 = 35$.
8	D	Since $\frac{6}{6}$ is equal to 1, the problem simplifies to 11 divided by 1. The answer is 11.
9	C	When any fraction is multiplied by its reciprocal, the cross numerators and denominators will always factor to 1.
10	B	$\frac{14}{21} \div \frac{28}{7}$ Becomes $\frac{14}{21} \times \frac{7}{28}$ After Keep–Change–Flip. Then, cross factor out a GCF of 7 from the 14 and 21, and a GCF of 7 from the 7 and 28. The simplified problem becomes: $\frac{2}{3} \times \frac{1}{4}$
11	A	$\frac{4}{3}$. Because $1 \div \frac{3}{4} = \frac{1}{1} \times \frac{4}{3} = \frac{4}{3}$
12	$\frac{1}{8}$	$\frac{1}{8}$. Because $\frac{1}{2} \div \frac{4}{1} = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$
13	C	$\frac{42}{4}$. Because $\frac{7}{2} \div \frac{2}{6} = \frac{7}{2} \times \frac{6}{2} = \frac{42}{4}$

Name: _____

Date: _____



Chapter 4: Expressions & Equations


Lesson 1: Whole Number Exponents

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Math Task Cards- Grade 6-Exponents-CCSS.MATH.CONTENT.6.EE.A.1

 Resource: Pin

 **Whole Number Exponents**

URL	QR Code
http://www.lumoslearning.com/a/6eea1	



Name: _____

Date: _____

1. Evaluate: 5^3

- (A) 15
- (B) 125
- (C) 8
- (D) 2

2. Write the expression using an exponent: $2 * 2 * 2 * 2 * 2 * 2$

- (A) $2 * 6$
- (B) 12
- (C) 2^6
- (D) 6^2

3. Write the expression using an exponent: $y * y * y * y$

- (A) 4y
- (B) $y/4$
- (C) 4^y
- (D) y^4

4. Find the numerical value of the following expression: 11^1

- (A) 11
- (B) 1
- (C) 12
- (D) 10

5. Write an expression using exponents: $2 * 2 * m * m$

- (A) $2(2m)$
- (B) 4m
- (C) 2^2m^2
- (D) $2/m$

6. Simplify: $4^3 * 4^2$

- (A) 20
- (B) 9
- (C) 4^5
- (D) 20



7. Simplify: $(b^2c)(bc^3)$

- (A) $3b/4$
- (B) $3b * 4$
- (C) b^3c^4
- (D) bc

8. Simplify: $(n^4x^2)^3$

- (A) $12n*6x$
- (B) $n^{12}x^6$
- (C) $n^{43}x^{23}$
- (D) n^7x^5

9. Simplify: $7^4/7^2$

- (A) 7^6
- (B) 7^3
- (C) 7^2
- (D) 7^4

10. Simplify: $[(3^5)(3^2)]^4$

- (A) 3^{28}
- (B) 3^{40}
- (C) 3^{10}
- (D) 3^{11}

11. Select all numbers that would have a total value greater than 50.

- (A) 6^2
- (B) 2^3
- (C) 5^2
- (D) 10^2
- (E) 4^4

12. Find the numerical value of 8^4 . Write your answer in standard form in the box.



Name: _____

Date: _____

Chapter 4: Expressions & Equations

Answer Key & Detailed Explanations



Lesson 1: Whole Number Exponents

Question No.	Answer	Detailed Explanation
1	B	The base is 5. The exponent is 3. 5 is multiplied 3 times, or $5 \times 5 \times 5 = 125$
2	C	The base is 2. Count the factors. There are 6. 6 is the exponent. $2 * 2 * 2 * 2 * 2 * 2 = 2^6$
3	D	The base is y. Count the factors. There are 4. 4 is the exponent. $y * y * y * y = y^4$
4	A	Write the factors: 11 Since 11 is the only factor, $11^1 = 11$
5	C	2^2m^2 The first base is 2. Count the number of 2s. There are 2. 2 is the exponent, so part of the expression is 2^2 The second base is m. Count the number of ms. There are 2. 2 is the exponent, so part of the expression is m^2 The full expression is written as: 2^2m^2
6	C	$4^3 * 4^2 = 4 * 4 * 4 * 4 * 4 = 4^5$
7	C	We know that $a^m * a^n = a^{(m+n)}$. Therefore, $(b^2c)(bc^3) = b^3c^4$
8	B	We know that $a^m * a^n = a^{(m+n)}$. Therefore, $(n^4x^2)^3 = n^{12}x^6$
9	C	We know that $a^m/a^n = a^{(m-n)}$. Therefore, $7^4/7^2 = 7^2$
10	A	$[(3^5)(3^2)]^4 = 3^{28}$ Keep the base the same. 3 is the base. Add the exponents inside the brackets. $5 + 2 = 7$. The expression becomes $[3^7]^4$. To simplify further, multiply the exponents (since the base has a power raised to a power.) $[3^7]^4 = 3^{7*4} = 3^{28}$
11	D & E	D. $10^2 = 10 \times 10 = 100$ E. $4^4 = 4 \times 4 \times 4 \times 4 = 256$
12	4096	$8^4 = 8 \times 8 \times 8 \times 8 = 4,096$

Progress Chart

Standard	Lesson	Page No.	Practice		Mastered	Re-practice /Reteach
			Date	Score		
CCSS						
6.RPA.1	Expressing Ratios	10				
6.RPA.2	Unit Rates	15				
6.RPA.3	Solving Real World Ratio Problems	19				
6.RPA.3.B	Solving Unit Rate Problems	23				
6.RPA.3.C	Finding Percent	27				
6.RPA.3.D	Measurement Conversion	31				
6.NS.A.1	Division of Fractions	48				
6.NS.B.2	Division of Whole Numbers	53				
6.NS.B.3	Operations with Decimals	57				
6.NS.B.4	Using Common Factors	61				
6.NS.C.5	Positive and Negative Numbers	65				
6.NS.C.6.A	Representing Negative Numbers	69				
6.NS.C.6.B	Ordered Pairs	73				
6.NS.C.6.C	Number Line & Coordinate Plane	79				
6.NS.C.7	Absolute Value	85				
6.NS.C.7.B	Rational Numbers in Context	88				
6.NS.C.7.C	Interpreting Absolute Value	93				
6.NS.C.7.D	Comparisons of Absolute Value	97				
6.NS.C.8	Coordinate Plane	101				
6.EE.A.1	Whole Number Exponents	130				
6.EE.A.2.A	Expressions Involving Variables	133				
6.EE.A.2.B	Identifying Expression Parts	136				
6.EE.A.2.C	Evaluating Expressions	139				
6.EE.A.3	Writing Equivalent Expressions	143				
6.EE.A.4	Identifying Equivalent Expressions	146				
6.EE.B.5	Equations and Inequalities	150				
6.EE.B.6	Modeling with Expressions	154				
6.EE.B.7	Solving One-Step Equations	158				
6.EE.B.8	Representing Inequalities	162				
6.EE.C.9	Quantitative Relationships	166				

Standard	Lesson	Page No.	Practice		Mastered	Re-practice /Reteach
			Date	Score		
CCSS						
6.G.A.1	Area	188				
6.G.A.2	Surface Area and Volume	194				
6.G.A.3	Coordinate Geometry	198				
6.G.A.4	Nets	205				
6.SPA.1	Statistical Questions	221				
6.SPA.2	Distribution	226				
6.SPA.3	Central Tendency	231				
6.SPB.4	Graphs & Charts	235				
6.SPB.5	Data Interpretation	243				
6.SPB.5.B	Describing the Nature	248				
6.SPB.5.C	Context of Data Gathered	252				
6.SPB.5.D	Relating Data Distributions	256				



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