

Most recent update: April 15, 2018

RightStart™ Mathematics

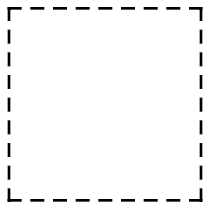
Corrections and Updates for Level E/Grade 4 Lessons and Worksheets, first edition

LESSON/WORKSHEET	CHANGE DATE	CORRECTION OR UPDATE
Lesson 5 Worksheet 6	05/01/2011	Figure D: The subtrahend should be $-15.6\mathbf{6}$ not -15.61 .
Lesson 13	03/01/2012	Caption of last graphic should say: Finding $\mathbf{5/6}$ of 12, which is 10.
Lesson 20	04/06/2016	Answers for worksheet 18 should say: Perimeter of the triangle is $5\text{-}\mathbf{7/10}$ in., not 5.7 in.
Lesson 24	10/25/2010	The game Percent Memory should be Percentages Memory.
Lesson 26 Worksheet 23-2	03/27/2014	Question 15 should be $\mathbf{28\%}$, not 30%.
Lesson 28	10/25/2010	Games: The game Percent Memory should be Percentages Memory.
Lesson 29	03/01/2012	At the bottom of the page the first caption should say: Showing $\mathbf{1/4}$. And the second caption should say: Showing $\mathbf{1/2}$.
Lesson 32	04/15/2018	The answers for the worksheet are missing between the abacuses and problems. Answers are $\mathbf{201,102}$ and $\mathbf{40,015}$ and $\mathbf{10,024,000}$.
Lesson 33	11/25/2010	The numbers that are carried for the problem 73,809 added 4 times or $73,809 \times 4$ are listed as 18,43. The carried numbers should be $\mathbf{13\ 3}$.
Lesson 35	10/25/2010	Games: The game Percent Memory should be Percentages Memory. The game One Half can be found in the <i>Math Card Games</i> book at F8 not F116.
Lesson 36 Worksheet 33	03/12/2007	There should be a rectangle around the worksheet that measures 7 inches by 10 inches. See attached PDF . Then, the answer to the number of 1 square inches that will fit is 70 sq. in.
Lesson 52	10/25/2010	Games: The game Find the Quotients can be found in the <i>Math Card Games</i> book at D1 not D2.
Lesson 56	01/20/2011	Under the last activity, the MR was missing. Press MR (The answer 2 will show)
Lesson 59	10/25/2010	Games: The game Harder War should be Harder Fraction War.

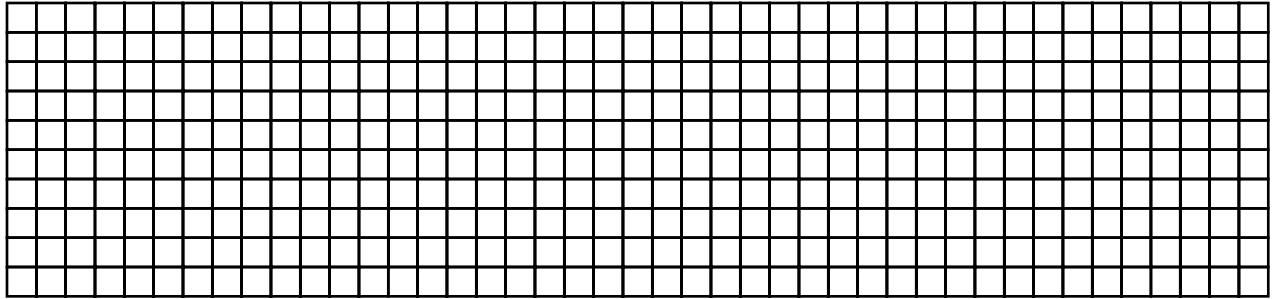
Lesson 60		12/01/2012	Updated Gas prices to reflect current day. PDF of Lesson and Worksheet are attached.
Lesson 60	Worksheet 64	12/01/2012	Updated prices. PDF attached.
Lesson 62	Worksheet 67	03/27/2014	Above Problems 17-32 in the second column, it should say Decimal (thousandths), not Decimal (hundredths).
Lesson 65		10/25/2010	Games: The game Harder War should be Harder Fraction War.
Lesson 67	Worksheet 73	04/04/2011	Figure D: Changed to reflect the answer 31.5. It is now 9 x 7 not 8 x 7.
Lesson 86		10/25/2010	Games: The game Gather the Factors can be found in the <i>Math Card Games</i> book at F25 not F26.
Lesson 89		12/02/2015	Worksheet answer for problem "e" is 3.55 , not 3.6.
Lesson 94		10/25/2010	Games: The game Threesomes Solitaire should be Multiples Solitaire.
Lesson 94		09/02/2010	Question 16 on Review Sheet 105-B. The answer should be \$7.86 instead of \$7.85.
Lesson 103		10/25/2010	Games: The game Threesomes Solitaire should be Multiples Solitaire.
Lesson 104		07/10/2006	The ten angle answers to problems 5-8 at the top of the page should be 108° , not 72°.
Lesson 107		06/01/2011	On the table of perimeters and areas that the child is to complete, the perimeter of the heptagon should be 20.3 cm . not 20.6.
Lesson 110		10/25/2010	Games: The game Find the Two Factors can be found in the <i>Math Card Games</i> book at P29 not F29.
Lesson 124		07/01/2011	The top $\begin{array}{r} 35 \overline{)19961} \quad r11 \\ 39 \underline{175} \\ 35 \underline{246} \\ \quad \underline{245} \\ \quad \quad 11 \end{array}$ $\begin{array}{r} 41 \overline{)29030} \quad r2 \\ 41 \underline{287} \\ 41 \underline{330} \\ \quad \underline{328} \\ \quad \quad 2 \end{array}$
Final Test		08/20/2014	Answer to 44 is $2 - 1 \frac{5}{6} = 1/6$.
Final test		10/01/2013	Added the final test to manual, see attached PDF .
Games list		11/25/2010	Games list was added at the end of manual. See attached PDF .

Name _____

Date _____



1. Tile Company is laying tile in the 43 ft by 10 ft hallway. Each tile is 1 ft by 1 ft. How many tiles do they need? Write the equation and explain.



2. Van is cutting squares that are 1 in. on a side from a piece of paper that measures 12 in. by 10 in. How many pieces will Van have? What is the name of the little squares?



3. The children in East School have a space 14 feet long by 10 feet high on a wall to display their work. Each piece of their work measures 1 ft by 1 ft. How many pieces will fit in the space?

4. How many square inches will fit in the large rectangle on this page? A square inch with dotted lines is drawn in the top left corner.

	24
	× 10
<hr/>	

	33
	× 10
<hr/>	

	84
	× 10
<hr/>	

	95
	× 10
<hr/>	

	119
	× 10
<hr/>	

	234
	× 10
<hr/>	

	356
	× 10
<hr/>	

	479
	× 10
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Lesson 60

Gasoline Prices

- OBJECTIVES**
1. To learn to read gasoline prices
 2. To understand how to work with a fraction of a cent

MATERIALS Worksheet 64, "Gasoline Prices"

WARM-UP Write the puzzle numbers of 3 2 1 5 0. Some solutions are:

$$3 + 2 \times 1 = 5 + 0 \qquad 3 - 2 = 1 - 5 \times 0$$

$$3/2 = 150\% \qquad 3 - 2 = 1^{50}$$


Ask the child to write the multiples of 8 to 80 as shown:

8 16 24 32 40
48 56 64 72 80

Then practice with the 8s facts. What is $16 \div 8$? [2] What is $40 \div 8$? [5] What is $56 \div 8$? [7] What is $72 \div 8$? [9] What is $80 \div 8$? [10]

ACTIVITIES **Facts practice.** Ask the child to take out Division Practice-7 and to do the facts in the **bottom** rectangle. The answers are:

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



Reading gas station signs. Ask the child to look at the worksheet. Have you ever seen signs like these? [at gas stations] What do you think they mean? Bring out the following points.

- They are prices for one gallon of gasoline. The dollar sign is omitted.
- The three words are different grades of gasoline.
- The $\frac{9}{10}$ means $\frac{9}{10}$ of one cent.
- The small 9s are also $\frac{9}{10}$ of one cent.
- The small 9s are also thousands of a dollar.

Fraction of a cent. What does one gallon of unleaded gas cost at Autoco Station? [3 dollars and 98 $\frac{9}{10}$ cents] What do you think I actually pay? [\$3 and 99¢] Explain that gas stations charge the next whole cent if the price is a half of a cent or more.

What is the cost of a gallon of unleaded gas at Ethanall Station? [3 dollars and 99 $\frac{9}{10}$ cents] What do you think I actually pay? [\$4]

Why do you think the stations price gas at 3.98 $\frac{9}{10}$ cents instead of 3.99 cents? [It seems cheaper.]

Problems. Ask the child to solve the following problems.

1. What is the cost of 2 gallons of premium fuel bought at Ethanall Station? Before he starts his work, ask Do you think your answer will be closest to seven dollars, eight dollars, or nine dollars? [\$8] Why? [The price is close to \$4 so 2 gallons is close to \$8.] When he is ready, ask him to share his solution.

Note: You might ask the child to copy down similar signs he sees.

The problem can be solved with the fractions or with decimals as shown below.

$$\begin{array}{r} \$4.04 \frac{9}{10} \\ + 4.04 \frac{9}{10} \\ \hline \$8.09 \frac{8}{10} \end{array} \qquad \begin{array}{r} \$4.049 \\ + 4.049 \\ \hline \$8.098 \end{array}$$

The cost is \$8.10 because .008 is more than half a cent.

2. What is the cost of 4 gallons of super fuel bought at Ethanall Station? What dollar amount will your answer be closest to? Ask the child his solution.

This could be done by adding 4 times, by doubling twice, or by multiplying.

The solution is shown below only with decimals.

$$\begin{array}{r} \\ \$4.029 \\ 4.029 \\ 4.029 \\ \hline 4.029 \\ \$16.116 \end{array} \qquad \begin{array}{r} \\ \$4.029 \\ \times 4 \\ \hline \$16.116 \end{array}$$

The cost is \$16.12.

3. What is the cost of 5 gallons of premium fuel bought at Autoco Station?

The solution is shown using addition and multiplication.

$$\begin{array}{r} \\ \$4.059 \\ 4.059 \\ 4.059 \\ 4.059 \\ \hline + 4.059 \\ \$20.295 \end{array} \qquad \begin{array}{r} \\ \$4.059 \\ \times 5 \\ \hline \$20.295 \end{array}$$

The cost is \$20.30.

4. Which price is nearest to four dollars? [the unleaded at Ethanall] What is the price of 3 gallons at that price? [\$11.997, so \$12.00]

Worksheet. Ask the child to do the worksheet. The solutions are as follows.

1. $\frac{9}{10}$ of one cent
2. $\frac{9}{10}$ of one cent
3. super
4. \$3 and 99¢, it is 3.98 $\frac{9}{10}$, but the $\frac{9}{10}$ is more than half, so we pay \$3 and 99¢.
5. \$4.00. \$3 and 99¢ plus 1 because the $\frac{9}{10}$ is more than half a cent.
6. \$7.98
7. \$8.00
8. \$8.06
9. \$12.09
10. \$12.18
11. \$12.15

Name _____

Date _____

These are signs at two gas stations in Autoville. At these stations, the customer pays the next cent if the fraction of a cent is half or more.

Unleaded	3.98 $\frac{9}{10}$
Super	4.02 $\frac{9}{10}$
Premium	4.05 $\frac{9}{10}$

AUTOCO STATION

Unleaded	3.99 ⁹
Super	4.02 ⁹
Premium	4.04 ⁹

ETHANALL STATION

1. What does the $\frac{9}{10}$ mean at the Autoco Station? _____
2. What does the little 9 mean at the Ethanall Station? _____
3. Which price is the same at the two stations? _____
4. How much would you pay for 1 gallon of unleaded gasoline at Autoco Station? Explain.

5. How much would you pay for 1 gallon of unleaded gasoline at Ethanall Station? Explain.

6. How much do you pay for 2 gallons of unleaded gasoline at Autoco Station? Explain.
7. How much do you pay for 2 gallons of unleaded gasoline at Ethanall Station?
8. How much do you pay for 2 gallons of super gasoline at Autoco Station?
9. How much do you pay for 3 gallons of super gasoline at Ethanall Station?
10. How much do you pay for 3 gallons of premium gasoline at Autoco Station?
11. How much do you pay for 3 gallons of premium gasoline at Ethanall Station?

[47 + 88, 50% of 48, 6000 times 9]

1. Write only the answers to the oral questions. 135 24 54,000

4. Write only the answers. $79 + 67 =$ 146 $63 - 49 =$ 14 200% of 51 = 102

7. Draw lines to match the left column with the right column.

38 thousand 38	_____	38,038
three hundred and eight	_____	38
three and eight tenths	_____	0.38
three-eighths	_____	$\frac{3}{8}$
thirty-eight hundred	_____	308
three hundred eighty	_____	3.8
thirty-eight	_____	3800
38 hundredths	_____	380

15-17. Add.

$$\begin{array}{r} 27 \\ 86 \\ 13 \\ +9 \\ \hline 135 \end{array}$$

$43,893 + 6748 =$ 50,641

$24.85 + 7.3 =$ 32.15

18-20. Subtract.

$$\begin{array}{r} 9470 \\ -1379 \\ \hline 8091 \end{array}$$

$5,000 - 999 =$ 4001

$10 - 4.5 =$ 5.5

21-23. Multiply.

$$\begin{array}{r} 608 \\ \times 45 \\ \hline 27,360 \end{array}$$

$7,183 \times 76 =$ 545,908

$718.3 \times 76 =$ 54,590.8

24-25. Divide.

$$\begin{array}{r} 7503r3 \\ 7 \overline{)52524} \\ \underline{35} \\ 175 \\ \underline{140} \\ 352 \\ \underline{280} \\ 724 \\ \underline{700} \\ 24 \end{array}$$

$$\begin{array}{r} 907r11 \\ 43 \overline{)39012} \\ \underline{81} \\ 50 \\ \underline{43} \\ 70 \\ \underline{70} \\ 12 \end{array}$$

26-29. Circle the equations.

$4 \times 9 = 36$
$\sqrt{4} = (9 + 3) \div 6$
$\sqrt{4} \times \sqrt{9} = \sqrt{36}$
$4 = 9 - 3 - 6$

30. $\frac{574 + 574 + 574 + 574}{4} =$ 574

31. $8945 - 853 + 853 + 5 =$ 8950

32-41. Write $<$, $>$, or $=$ in the circles.

32 million $\bigcirc >$ 3,200,000

$\frac{3}{12}$ $\bigcirc <$ $\frac{3}{11}$

$\frac{7}{15}$ $\bigcirc <$ $\frac{9}{15}$

1 $\bigcirc >$.98

70% $\bigcirc <$ $\frac{3}{4}$

$56 \times (9 + 1.8)$ $\bigcirc =$ $(56 \times 9) + (56 \times 1.8)$

$10 \times .78$ $\bigcirc <$ 10

Average of (20, 21, 24) $\bigcirc >$ 20

10% $\bigcirc =$.1

2^3 $\bigcirc =$ 8

42-46. Complete the equations.

$\frac{2}{5} + \frac{1}{5} + \frac{2}{5} = 1$

$\frac{3}{8} + \frac{1}{2} + \frac{1}{4} = 1\frac{1}{8}$ [or $\frac{2}{8}$]

$2 - 1\frac{5}{6} = \frac{1}{6}$

$6 \times \frac{1}{2} = 3$ [or .5]

$5 \div 2 = 2.5$

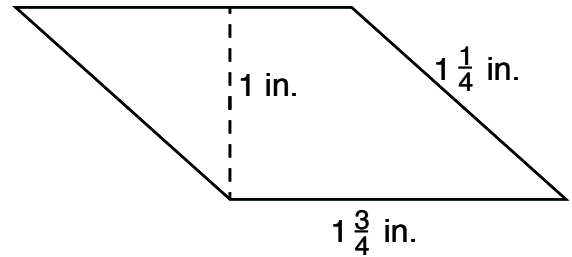
47. Factor 36 into prime numbers using exponents.

$= 6 \times 6$

$= 2 \times 3 \times 2 \times 3$

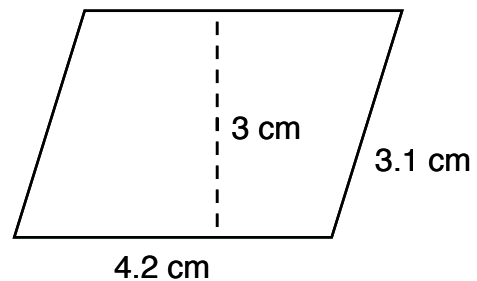
$= 2^2 \times 3^2$

48. Find the perimeter of the parallelogram.



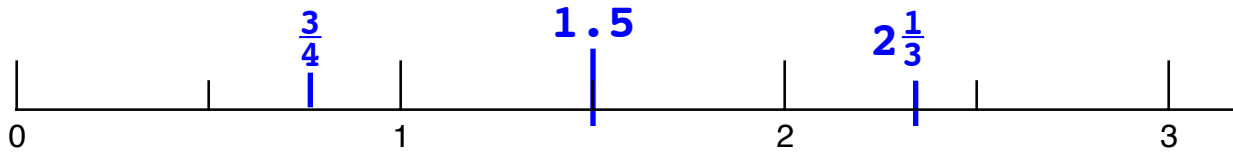
$P = 1\frac{1}{4} + 1\frac{3}{4} + 1\frac{1}{4} + 1\frac{3}{4}$
 $= 6 \text{ in.}$

49. Find the area of the parallelogram.



$A = 4.2 \times 3$
 $= 12.6 \text{ cm}^2$

50-52. On the number line below, show the following numbers: $\frac{3}{4}$, 1.5, and $2\frac{1}{3}$. Label the numbers.



53. A class of 26 students is going on a field trip on May 2. Six will fit in a van. How many vans are needed?

$$\frac{26}{6} = 4 \text{ r}2$$

5 vans needed

54. If $n = 3$, what is $8n$? **24**
What is $n + 9$? **12**

55. Complete the table.

1	5	6
2	10	11
3	15	16
4	20	21
5	25	26
10	50	51

56. Solve the follow equation for m .

$$2m - 5 = 3$$

$$**m = 4**$$

57. Chris bought a sweater that was on sale for \$20. It was half off. What is his total cost if sales tax is 6%. What was the original price of the sweater?

$$**\$20 + \$1.20 = \$21.20**$$

$$**\$40**$$

58. Morgan did a quarter of a puzzle on Monday and another 35 percent on Tuesday. What percent does Morgan have left to finish?

$$**25\% + 35\% = 60\%, \text{ fin}**$$

$$**100\% - 60\% = 40\%, \text{ unf}**$$

59. Dana's room measures 9 feet by 12 feet. Carpeting is \$20 per square yard. What will the carpeting for Dana's room cost?

$$**9 \text{ ft by } 12 \text{ ft} =**$$

$$**3 \text{ yd by } 4 \text{ yd}**$$

$$**A = 3 \times 4 = 12 \text{ yd}^2**$$

$$**\text{cost} = 12 \times \$20 = \$240**$$

60. About thirty-one percent of the earth's surface is covered by land. A dart is thrown at a map of the earth. What is the probability that it will land on water shown on the map? Give your answer to one decimal place.

.7

1. Write only the answers to the oral questions. _____

4. Write only the answers. $79 + 67 =$ _____ $63 - 49 =$ _____ 200% of $51 =$ _____

7. Draw lines to match the left column with the right column.

38 thousand 38	38,038
three hundred and eight	38
three and eight tenths	0.38
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32 million 3,200,000

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1 .98

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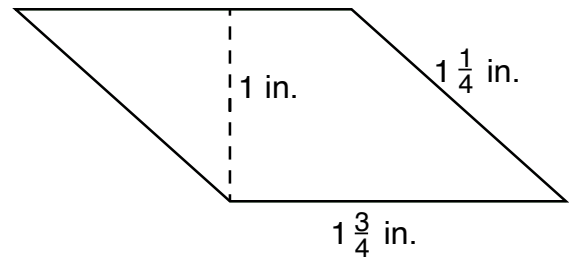
$2 - \underline{\hspace{1cm}} = \frac{1}{6}$

$6 \times \underline{\hspace{1cm}} = 3$

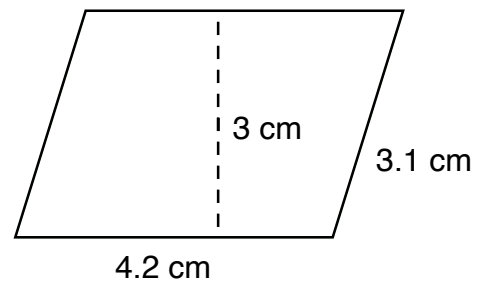
$5 \div \underline{\hspace{1cm}} = 2.5$

47. Factor 36 into prime numbers using exponents.

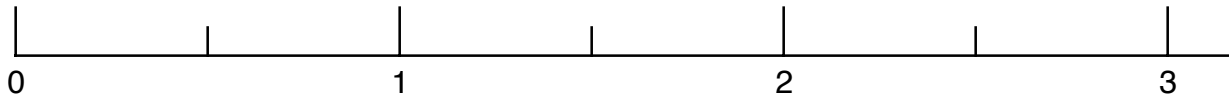
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Games list for Level E

Game	Lesson	MCG
Advanced Authors	86	P17
Corners with Eighths	19	N/A
Corners with Tenths	20	N/A
Division Memory	52	D2
Division War	120	D12
Equal Quotients	73	D6
Equivalent Fractions	65	F24
Factoring	81	F27
Find the Quotients	52	D1
Find the Two Factors	110	P29
Fraction of Sixteen	17	F12
Fraction of Twelve	13	F10
Fraction Sum Rummy	130	F34
Fraction Times a Fraction	130	F38
Fraction War	21	F7
Gathering the Factors	86	F25
GCF	94	F28
Harder Fraction War	59	F9
Mixed to Improper Fractions	52	F22
Multi-Fun	110	P20
Multiple Authors	79	P16
Multiples Solitaire	94	P19
One	10	F6
One Half	35	F8
One or Two	16	F18
Percentage Old Main	28	F47
Percentage War	43	F48
Percentages Memory	24	F46
Remainders	79	D8
Simplifying Fractions	103	F29
Simplifying with the Multiplication Table	86	F23.1
Weighted Multi-Fun	110	P28