

Answer Key

LAS AMERICAS ASPIRA ACADEMY

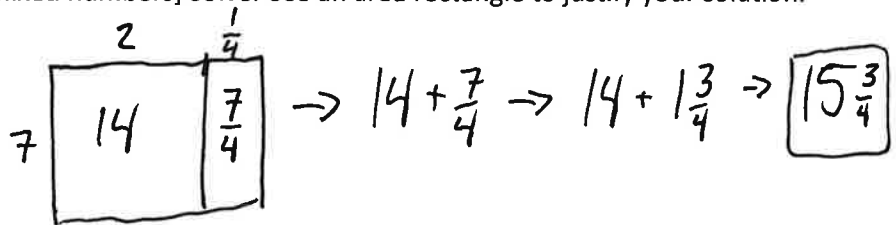
7TH GRADE SUMMER MATH PACKET—OPTIONAL

The purpose of this packet is to give you an opportunity to review crucial skills from this past year to help ensure that you are prepared for next year's math work. Our math teachers selected the topics that they thought were the most important to your success in the upcoming school year. There is no need to turn this packet in. In fact, the answers to this packet can be found at

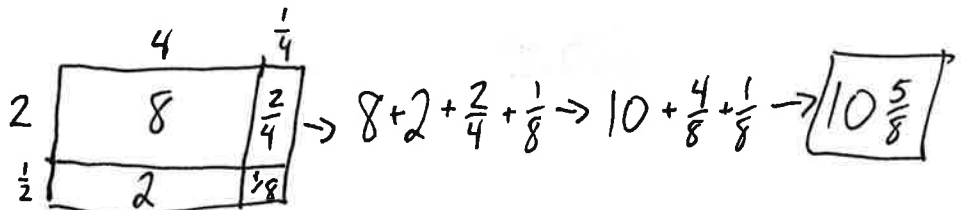
<https://laaalibrary.weebly.com/summer.html>. The reason we are making the answer key public to you is so that you can identify topics you might need help with. If you are struggling with a set of problems, feel free to check sites like [khanacademy.org](https://www.khanacademy.org) to see if they can help you. If you continue to struggle please feel free to reach out to me, Mr. Reitemeyer (michael.reitemeyer@laaa.k12.de.us), for support. Good luck and have a great summer.

1. [Multiplying fractions/mixed numbers] Solve. Use an area rectangle to justify your solution.

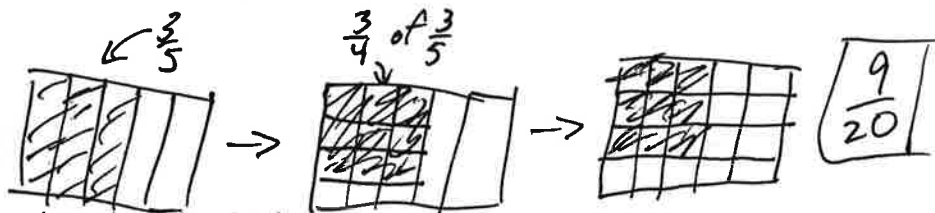
a. $2\frac{1}{4} \times 7$



b. $4\frac{1}{4} \times 2\frac{1}{2}$



c. $\frac{3}{4} \times \frac{3}{5}$



2. [Dividing fractions/mixed numbers] Solve.

a. $\frac{3}{4} \div \frac{1}{8}$

6

c. $2\frac{1}{4} \div 4$

$\frac{9}{16}$

b. $6\frac{1}{2} \div \frac{1}{4}$

26

d. $10\frac{2}{5} \div 2\frac{3}{5}$

4

3. [Adding and subtracting fractions/mixed numbers] Solve.

a. $2\frac{1}{4} + 7\frac{3}{4}$ 10

b. $\frac{3}{4} - \frac{2}{5}$ $\frac{7}{20}$

c. $10\frac{1}{6} - 7\frac{1}{7}$ $3\frac{1}{42}$

4. [Decimal operations] Solve.

a. $10.38 - 6.42$

3.96

d. 6.2×0.34

2.108

b. $147.3 - 41.89$

105.41

e. $8.2 \div 4$

2.05

c. 17.4×8.1

140.94

f. $17.4 \div 2.2$

7.9090...

5. After last night's basketball banquet there were $2\frac{3}{4}$ cakes left over. Each cake had been cut into 8 slices originally. How many slices of cake are left over?

22

6. [Translating expressions] Write an expression (no equals sign) for each context.

a. Kelsey starts the game with an additional 10 points.

$$K + 10 \quad [\text{the variable can be any letter}]$$

b. Vanessa has three fewer shirts than she used to have.

$$V - 3$$

c. There are c cookies in a pack. Josue ate 2 packs of cookies then 3 additional cookies.

$$2 \times C + 3$$

d. Diane has taken 1 more than double the shots she took last year.

$$2 \times D + 1$$

7. [Translating equations] Write an equation (include an equals sign) for each context.

a. Elyse is 4 years older than Kyrie.

$$E = K + 4$$

b. Tyaire is 3 inches shorter than Monica.

$$T = M - 3$$

c. If you halved Nayeli's allowance it would be the same as triple Jose's allowance.

$$\frac{N}{2} = J \times 3 \quad \text{OR} \quad \frac{1}{2} \times N = J \times 3$$

8. [Translating equations] Write a context (a sentence, like from Questions 6&7) for each equation.

a. $x + 3 = 12$

Examples may vary...

In 3 years Carolina will be 12 years old.

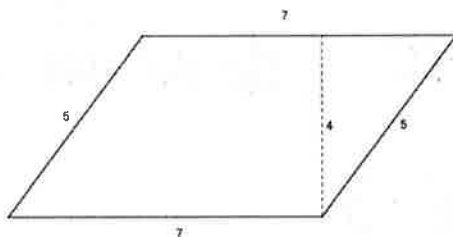
b. $c = 2a$

We have twice as many carrots as apples.

c. $2b + 3 = p$

The Patriots have 3 points more than double the Bears' score.

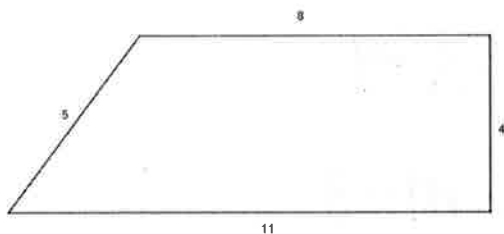
9. [Area and perimeter] Find the area and perimeter of the following parallelogram.



Area = 28 units^2

Perimeter = 24 units

10. [Area and perimeter] Find the area and perimeter of the following trapezoid.



Area = 38 units^2

Perimeter = 28 units