Have you Mastered *All About Math?*

If your student did not complete *All About Math* Level 5, use this checklist and the student activity pages following to verify if placement in Level 5 is needed. Your student should get all items in a question correct in order to checkmark that question.

☐ 1. Your student can use comparison symbols to compare decimals to the thousandths place and round decimals to the nearest hundredth. Have your student compare the decimals and round the decimal on the student activity page.

Comparison: *0.847 < 0.85* **Round:** *0.85*

☐ 2. Your student can add or subtract fractions with unlike denominators and write answers in their simplest form. Have your student read and solve the story problem on the student activity page.

Answer: $1\frac{5}{6}$ *trays*

☐ 3. Your student can represent division as a fraction and solve the problem. Have your student write the expression, write the fraction, and solve the problem on the student activity page.

Expression: $5 \div 4$ **Fraction:** $\frac{5}{4}$

Answer: $1\frac{1}{4}$ *hours each*

☐ 4. Your student can find perimeter and area. Have your student solve the problems on the student activity page. Be sure your student labels the answer.

Answers: *12 feet, 8 feet, 12 feet, 8 feet; 40 feet* **Answer:** *20 sq ft*

☐ 5. Your student can compare the size of a product, without solving, based on the size of the factors. Have your student write the comparison symbol and explain their reasoning.

Answer: $\frac{6}{6} \times 12 = 12$, $\frac{6}{6}$ *equals one whole. Multiplying by one does not change the value.*

Answers: $7 \times \frac{3}{5} < 7$, $\frac{3}{5}$ *is less than one whole, so multiplying by it makes the product smaller.*

☐ 6. Your student can multiply and divide fractions. Have your student find the product and quotient on the student activity page.

Answer: $2\frac{1}{3} \times 3 = 7$ **Answer:** $\frac{4}{5} \div 2 = \frac{2}{5}$

☐ 7. Your student can multiply multi-digit numbers using the standard algorithm. Have your student find the product on the student activity page.

Answer: *684 × 7 = 4,788* **Answer:** *86 × 54 = 4,644*

☐ 8. Your student can divide multi-digit numbers. Have your student find the quotient on the student activity page.

Answer: *936 ÷ 12 = 78* **Answer:** *1,043 ÷ 24 = 43 R11*

☐ 9. Your student can add and subtract decimals. Have your student find the sum or difference on the student activity page.

Answer: *6.487 + 2.356 = 8.843* **Answer:** *9.4 − 3.875 = 5.525*

☐ 10. Your student can multiply and divide decimals. Have your student solve the problems on the student activity page.

Answer: *3 × 1.48 = 4.44* **Answer:** *0.7 × 0.6 = 0.42* **Answer:** *3 ÷ 0.15 = 20*

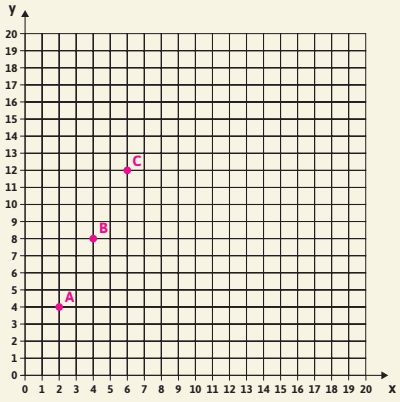
☐ 11. Your student can generate patterns and identify relationships between corresponding terms in two patterns. Have your student continue the pattern, and then explain the relationship between the two given patterns.

Answer: 7, 17, 37, 77, 157, 317

Answer: Pattern B numbers are $1\frac{1}{2}$ times the numbers in Pattern A. Or, Pattern A numbers are $\frac{2}{3}$ times the numbers in Pattern B.

☐ 12. Your student can represent and interpret points on a coordinate grid. Have your student plot the points on the student activity page and describe the relationship.

Answer:



Answer: *The y coordinate is two times the x coordinate.*

☐ 13. Your student can find volume using side lengths. Have your student write the equation and find the volume on the student activity page.

Answer: 60 cubic units

☐ 14. Your student can solve story problems involving cubic units of measure. Have your student read and solve the story problem on the student activity page.

Answer: 31,104 cubic inches

☐ 15. Your student can find the volume of a figure composed of two rectangular prisms. Have your student write an equation and find the volume on the student activity page.

Answer: $(4 \times 6 \times 2) + (4 \times 10 \times 3) = 168$ cubic units

☐ 16. Your student can convert metric measurements using powers of ten. Have your student convert the measurements on the student activity page.

10,000 millimeters: *1,000 centimeters, 10 meters*

5,000 grams: *5 kilograms*

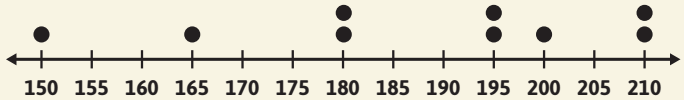
8 kilometers: *8,000 meters, 800,000 centimeters*

☐ 17. Your student can create and interpret a dot/line plot. Have your student use the dataset to create a dot plot and answer the questions on the student activity page.

Traveled 180 miles: *2*

Traveled 200 miles or more: *3*

Greatest distance: *210 miles*



☐ 18. Your student can classify two-dimensional shapes into categories and subcategories based on their attributes. Have your student identify the shapes and explain the classification on the student activity page.

Answer: *square*

Answer: *equilateral triangle*

☐ 19. Your student can use parentheses to solve equations. Have your student solve each equation on the student activity page.

Answer: *50*

Answer: *112*

☐ 20. Your student can find the area of a rectangle with fractional side lengths. Have your student find the area of each rectangle on the student activity page.

Answer: $16\frac{1}{2}$ *square feet*

Answer: $16\frac{7}{8}$ *square feet*

☐ 21. Your student can use the distributive property to multiply multi-digit numbers. Have your student break apart one factor and solve each problem on the student activity page.

Answer: $36 \times 7 = (30 \times 7) + (6 \times 7) = 252$

Answer: $48 \times 25 = (40 \times 25) + (8 \times 25) = 1{,}200$

How did your student do?

- If your child could easily complete 19 or more of the 21 skills, you have achieved mastery of the *All About Math* program
- If just one or two areas were difficult, you can remediate in those areas.
- If 18 or fewer boxes were checked, use the *All About Math* placement tests at https://www.allaboutlearningpress.com/math-placement/ to determine where to start to build a strong foundation for math.

If you have any questions about the program or would like to learn how to adapt certain aspects of the program to accommodate your child's needs, feel free to call us at 715-477-1976 or email us at support@allaboutlearningpress.com. And if you need ideas on how to help your child build skills, just let us know—we are always happy to help!

1. Write the comparison symbol to make the statement true. Then round the decimal.

0.847 ___ 0.85

Round 0.847 to the nearest hundredth. _____

2. Solve the story problem. Then, write your answer in simplest form.

A baker made $3\frac{2}{3}$ trays of muffins. Customers bought $1\frac{5}{6}$ trays.

How many trays remain? _____

3. Write the expression and fraction to represent the situation. Then find the amount each person receives.

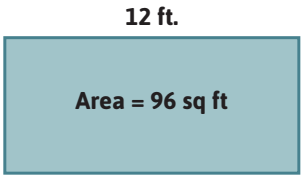
A coach has five hours for individual practice sessions and splits the time equally among four players.

Expression: _____

Fraction: _____

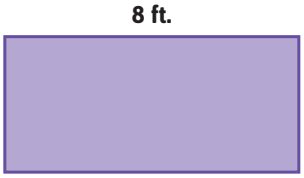
How much time does each player get? _____

4. Find the perimeter and the area using the rectangles below.



What is the measurement of each side? _____

Perimeter = _____



Area = _____

5. Write the comparison symbol to make each statement true without solving the problems. Then explain how you know.

$\frac{6}{6} \times 12$ _____ 12

$7 \times \frac{3}{5}$ _____ 7

6. Solve each equation by multiplying or dividing. Answer in simplest form.

$2\frac{1}{3} \times 3 =$ _____

$\frac{4}{5} \div 2 =$ _____

7. Use the standard algorithm to find the product for each equation.

684 × 7 = _____

86 × 54 = _____

8. Find the quotient for each equation.

936 ÷ 12 = _____

1,043 ÷ 24 = _____

9. Find the sum or difference for each decimal equation below.

6.487 + 2.356 = _____

9.4 – 3.875 = _____

10. Solve the following equation by multiplying or dividing.

$3 \times 1.48 =$ _____

$0.7 \times 0.6 =$ _____

$3 \div 0.15 =$ _____

11. Use the rule shown below to continue the pattern.

Start	Rule						
2	× 2 + 3	___	___	___	___	___	___

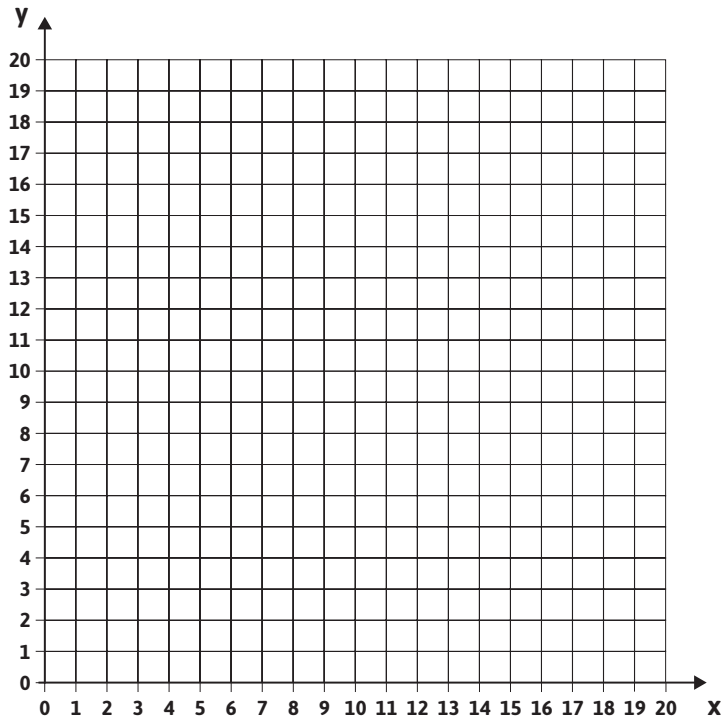
Two patterns are shown below. Describe the relationship between the numbers in Pattern A and Pattern B.

Pattern A: 4, 8, 12, 16, 20

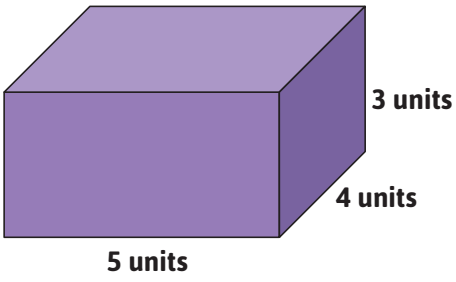
Pattern B: 6, 12, 18, 24, 30

12. Plot the following points on the coordinate grid. Then describe the relationship between the x- and y-values.

A (2, 4) B (4, 8) C (6, 12)



13. Find the volume of the rectangular prism below.



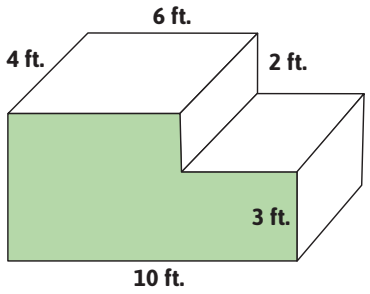
Volume = _____ cubic units

14. Read and solve the story problem below.

Caleb is packing supplies into a large storage container. The container is 4 feet long, 3 feet wide, and 18 inches high. Caleb wants to know how much space the container can hold.

What is the volume of the container in cubic inches? _____

15. The figure is composed of two rectangular prisms. Find the volume of the irregular rectangular prism.



Volume = _____ cubic feet

16. Convert the units of measurement. Then complete the chart by filling in the correct measurements.

Unit of Measurements	Convert to:	
10,000 millimeters	_____ centimeters	_____ meters
5,000 grams	_____ kilograms	
8 kilometers	_____ meters	_____ centimeters

17. The dataset shows the distances traveled by several students during a walking challenge. Distances are measured in miles. Use the dataset and number line below to create a dot plot showing the distances traveled.

Dataset: 150, 180, 195, 210, 180, 195, 210, 165, 200

How many students traveled 180 miles? _____

How many students traveled 200 miles or more? _____

What is the greatest distance traveled? _____

18. Identify the shapes that match each description.

A shape with four equal sides and four right angles that also belongs to the categories rectangle and parallelogram.

What shape am I? _____

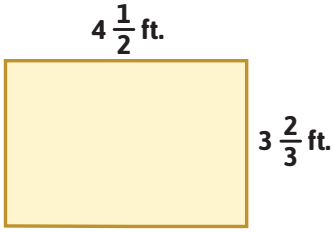
A triangle that belongs to three categories because it has three equal sides and three acute angles.

What shape am I? _____

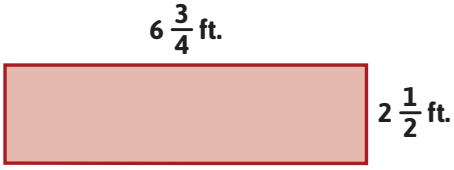
19. Use parentheses to solve the following equations.

$(6 + 4) \times (8 - 3) =$ _____ $(12 - 5) \times (7 + 9) =$ _____

20. Find the area of each rectangle with fractional side lengths. Write the answer as a mixed number.



Area = _____ square feet



Area = _____ square feet

21. Use the distributive property to solve each equation. Break apart one factor to make each problem easier to solve. Then find the product.

$36 \times 7 =$ _____

$48 \times 25 =$ _____