

**AMERICAN MATH HW
WEEK OF 28APR TO 02MAY**

Due Date: 05/04 by midnight

Focus for the week: The focus of the HW this week is to be able to work through one FULL LENGTH PRACTICE TEST for F.A.S.T.

Pacing guideline: Work on 8 questions per day.

Monday – Problems 1-8

Tuesday - Problems 9-16

Wednesday - Problems 17-24

Thursday - Problems 25-32

Friday - Problems 33-39

Submission Instructions: Complete HW submission require that you do BOTH Part 1 and Part 2. Both parts have the same problems. Part 1 is used to show your work, and Part 2 is used to submit only final answers.

Part 1 - Upload homework on Archie and wait till you get the message – “**the file has been successfully uploaded**”. IF for any reason you have technical issues, get in touch with me as soon as possible.

IMPORTANT – Please show all your work for FULL CREDIT.

Part 2 – Put your final answers on HMH.

Note: Bring your homework to class everyday. I will discuss the HW from the previous day in every class. It is important to practice the assigned topics daily because the next day’s instruction builds on the previous lesson.

ANNOUNCEMENT – You have a quiz on Word Problems on Thursday, 05/01. Review the CW packet for this week. Focus especially on the problems you circled in class.

- 1** A rectangle has an area of 24 square inches. If the rectangle's width were 2 inches wider, its area would be 40 square inches. What is the length, in inches, of the rectangle?

Ⓐ 3 inches Ⓒ 12 inches
Ⓑ 8 inches Ⓓ 16 inches

- 2** Select **all** the composite numbers that are the product of two prime numbers.

Ⓐ 6 Ⓓ 27
Ⓑ 12 Ⓔ 45
Ⓒ 21 Ⓕ 51

- 3** A certain 3-digit number is divisible by 4. The digit in the hundreds place is divisible by 4, but the digit in the tens place is not. Which of the following could be the 3-digit number?

Ⓐ 420 Ⓒ 618
Ⓑ 584 Ⓓ 863

- 4** Raven draws a model to show $\frac{3}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$. She draws a circle and divides it into equal sections. She shades some of the sections. Which statement explains how many sections Raven should divide the circle into?

Ⓐ 3, because the numerator is 3
Ⓑ 5, because the numerator is 5
Ⓒ 3, because she is adding 3 fractions
Ⓓ 5, because each section shows $\frac{1}{5}$ of the whole

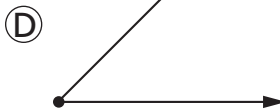
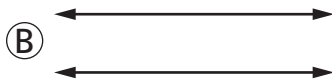
- 5** In which numbers is the value of the digit 2 equal to ten times the value of the digit 2 in 372,159? Select **all** the correct answers.

Ⓐ 184,237
Ⓑ 215,149
Ⓒ 424,189
Ⓓ 512,099
Ⓔ 627,815

6 Which comparison is true?

- Ⓐ $0.4 > 0.86$
- Ⓑ $0.43 > 0.8$
- Ⓒ $0.43 < 0.86$
- Ⓓ $0.68 < 0.34$

7 Which of these is an angle?



8 Rosalee bought 3 bracelets and 4 necklaces and spent between \$60 and \$80. Each bracelet costs the same amount. Each necklace costs the same amount. The price of a bracelet is \$12.

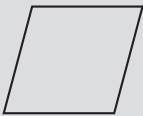
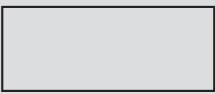
Part A

What is the LEAST amount Rosalee could have spent on a necklace?

Part B

What is the GREATEST amount Rosalee could have spent on a necklace?

- 9** Place an X in the table to show whether the attribute applies to the figure.

		
Contains acute angles		
Contains obtuse angles		
Contains perpendicular sides		

- 10** Which expression is equivalent to 46×29 ?

- Ⓐ $(40 \times 2) + (40 \times 9) + (6 \times 2) + (6 \times 9)$
- Ⓑ $(4 \times 20) + (4 \times 9) + (6 \times 20) + (6 \times 9)$
- Ⓒ $(40 \times 2) + (40 \times 90) + (6 \times 2) + (6 \times 90)$
- Ⓓ $(40 \times 20) + (40 \times 9) + (6 \times 20) + (6 \times 9)$

- 11** What is $\frac{2}{10} + \frac{7}{100}$?

Write the correct numbers from the list in the boxes to complete the equation.

$$\frac{2}{10} + \frac{7}{100} = \frac{\boxed{}}{100} + \frac{7}{100} = \frac{\boxed{}}{\boxed{}}$$

2	9	10	20	27	72	100
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- 12** After school, Andrew boards the school bus and waits 5 minutes for the bus to leave school. The ride to Andrew's bus stop takes 23 minutes. It takes 4 minutes for Andrew to walk from the bus stop to his house. Andrew arrives home from school at 4:10 p.m. At what time does Andrew board the school bus?

- Ⓐ 3:28 p.m.
- Ⓑ 3:33 p.m.
- Ⓒ 3:38 p.m.
- Ⓓ 3:56 p.m.

- 13** Jerrick adds some fractions and correctly finds the sum of $\frac{5}{8}$. Select **all** of the expressions equal to $\frac{5}{8}$.

- Ⓐ $\frac{2}{8} + \frac{2}{8} = \frac{5}{8}$
- Ⓑ $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$
- Ⓒ $\frac{1}{8} + \frac{2}{8} + \frac{2}{8}$
- Ⓓ $\frac{1}{8} + \frac{2}{8} + \frac{3}{8}$
- Ⓔ $\frac{1}{8} + \frac{1}{8} + \frac{2}{8} + \frac{1}{8}$

- 14** What is the value of p in the equation shown?

$$212 + 125 = 200 + p$$

$$p = \underline{\hspace{2cm}}$$

- 15** Valerie writes four fractions that are equivalent to $\frac{8}{12}$ and explains how she can use fraction strip models to show that the fractions are equivalent.

Place an X in the table to show the fraction matching Valerie's explanation.

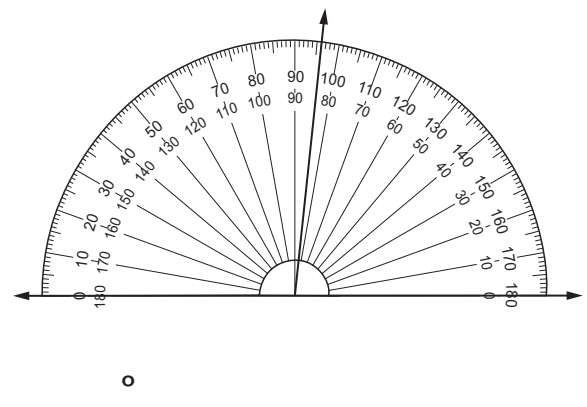
	$\frac{2}{3}$	$\frac{4}{6}$	$\frac{16}{24}$	$\frac{32}{48}$
I divided each of the original parts into two equal parts.				
I divided each of the original parts into four equal parts.				
I combined two parts to make one larger part.				
I combined four parts to make one larger part.				

- 16** What is 4,379 rounded to the nearest thousand?

Ⓐ 4,000 Ⓒ 4,400
Ⓑ 4,300 Ⓓ 5,000

- 17** Hernan chooses two numbers. The first number is 30. He knows that 30 is 6 times the second number. What is the second number?
- _____

- 18** What is the measure of the acute angle?



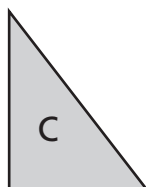
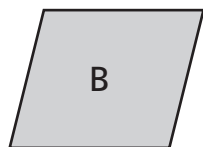
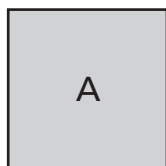
- 19** A student created the following table to show how to change from centimeters to meters. Look at the centimeter value in the left column and determine which meter measurement it equals.

Write the correct numbers from the list in the table.

Centimeters	Meters
100	
200	
500	
1,000	

1	2	5	10	20	50	100
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- 20** Write the letter for each shape under the correct description in the table. Some shapes may be used more than once or not at all.

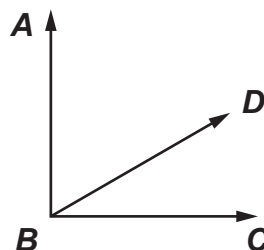


Has perpendicular sides	Has parallel sides	Has a right angle

21 Which of the following equations is true?

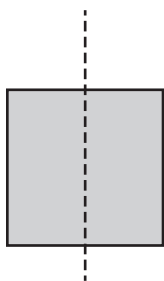
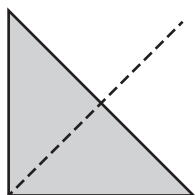
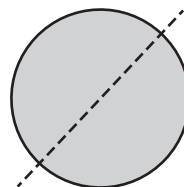
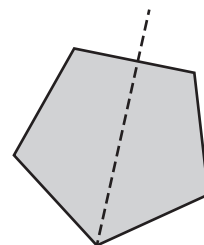
- Ⓐ $27 + 15 = 20 + 23$
- Ⓑ $31 - 11 = 9 + 11 + 11$
- Ⓒ $35 + 7 = 50 - 8$
- Ⓓ $28 + 15 = 29 + 15$

22 The diagram shows a right angle cut into two smaller angles. If angle ABD is 60° , what is the measurement of angle DBC ?



- Ⓐ 30°
- Ⓑ 60°
- Ⓒ 90°
- Ⓓ 150°

23 Select **all** the figures that show a line of symmetry.

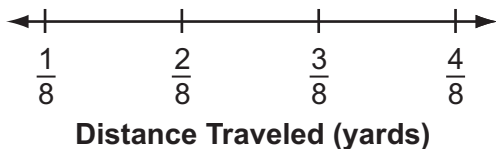
**A****B****C****D****E**

- Ⓐ shape A
- Ⓑ shape B
- Ⓒ shape C
- Ⓓ shape D
- Ⓔ shape E

- 24** Ryan tests 10 different paper airplane designs and flies them in the school gym. He finds that 5 fly $\frac{1}{2}$ yard, 3 fly $\frac{1}{4}$ yard, and 2 fly $\frac{1}{8}$ yard.

Create a line plot that shows the distances of the planes flown.

Ryan's Test Flight



- 25** Select **all** the number comparisons that are true.
- Ⓐ $9,812 < 9,821$
 - Ⓑ $7,153 > 7,315$
 - Ⓒ $4,912 < 4,219$
 - Ⓓ $6,741 > 6,417$
 - Ⓔ $8,523 > 8,235$

- 26** What is $2,937 + 3,405$?

- Ⓐ 5,342 Ⓒ 6,412
- Ⓑ 6,342 Ⓓ 6,512

- 27** Maggie has 5 containers to plant flowers in. Each container holds $\frac{2}{3}$ cup of soil. How much total soil will Maggie use?

Fill in the blank with the correct number from the list.

Maggie will use a total of

_____ cup(s) of soil.

$\frac{5}{3}$	$\frac{7}{3}$	$\frac{10}{3}$	3	4
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- 28** Viktor gives a cashier \$125.00 to purchase baseball equipment. He buys a glove for \$30.00, a helmet for \$45.00, a bat for \$27.50, and two baseballs for \$5.00 each. Viktor pays an additional \$7.00 for tax. Viktor asks to get all of his change in quarters. How many quarters does he get?

- Ⓐ 12 Ⓒ 22
- Ⓑ 21 Ⓓ 540

- 29** Sarah scored 132 points during basketball season. Her sister Jenny scored three times as many points during basketball season. Which equation shows how to determine the number of points Jenny scored, y , in the season?

Ⓐ $y \div 3 = 132$

Ⓑ $132 - 3 = y$

Ⓒ $132 + 3 = y$

Ⓓ $3 \times y = 132$

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- 30** What is 4,050 divided by 5?

Ⓐ 800

Ⓒ 811

Ⓑ 810

Ⓓ 851

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- 31** Kiara is comparing five fractions to $\frac{1}{2}$. Which statements show an accurate comparison?

Select **all** the correct answers.

Ⓐ $\frac{1}{2} < \frac{3}{4}$

Ⓑ $\frac{1}{2} < \frac{2}{5}$

Ⓒ $\frac{1}{2} = \frac{3}{6}$

Ⓓ $\frac{1}{2} > \frac{5}{7}$

Ⓔ $\frac{1}{2} > \frac{2}{8}$

- 32** Esme is converting fractions to decimals. What does each fraction equal as a decimal?

Fill in the blanks with the correct numbers from the list.

$$\frac{3}{10} = \underline{\hspace{2cm}}$$

$$\frac{3}{100} = \underline{\hspace{2cm}}$$

$$\frac{32}{100} = \underline{\hspace{2cm}}$$

0.23	0.03	3.00	0.30	0.32	3.02
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- 33** Greg noticed a pattern in the following numbers:

2, 5, 11, 23, . . .

He wants to continue the pattern. What are the next three numbers?

2, 5, 11, 23, _____, _____, _____

34 Jenna takes 60 photos at her family reunion. She frames 18 of them. She arranges the remaining photos equally across 6 pages in her family's scrapbook.

- Write an equation that can be used to determine the number of photos, p , that Jenna arranges on each page of the scrapbook.
- Find the number of photos that Jenna arranges on each page.
- Explain how you can check the reasonableness of your answer.

- 35** Alex stores his baseball card collection in a soft-sleeve album. The table shows the total number of cards he has stored and the number of pages with cards.

Baseball Card Collection

Number of Pages	Number of Cards
3	18
7	42
11	66
15	90
19	?

- If the number of cards on each page is the same and the pattern continues, write a number sentence that could be used to find the total number of cards Alex stores on 19 pages.
- Find the total number of cards Alex stores on 19 pages.
- Based on the pattern, Alex's friend figures that Alex can store 24 cards on each page of his album. Explain the error in the friend's calculation. As part of your explanation, find the correct number of cards that Alex can store on each page of his album.

- 36** An apple farmer grows 4 different types of apples on her 36-acre farm. She grows 64 apple trees per acre.
- What is the total number of apple trees growing on her farm?
 - If the farmer grows an equal number of trees for each type of apple, how many trees of each type does she grow?

- 37** The table shows the sizes and weights of packages of ground beef sold at a store.

Ground Beef

Size	Weight (pounds)
Small	$\frac{2}{5}$
Medium	$\frac{4}{5}$
Large	$\frac{6}{5}$
Jumbo	$\frac{8}{5}$

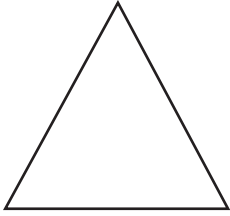
Joe bought 7 medium packages of ground beef, and Anh bought 3 jumbo packages of ground beef.

- What is the difference in the weights, in pounds, of Joe's and Anh's purchases?
- Explain how you got your answer.

38 Patricia is buying peaches, oranges, apples, and plums for a fruit salad.

- She buys 3 times as many peaches as oranges. She buys 2 times as many peaches as plums. She buys 4 oranges. How many peaches and plums does Patricia buy?
- Patricia's recipe calls for 2 times as many apples as the rest of the fruit. How many apples does she need?

39 Is this triangle best described as right, acute, or obtuse?



Explain how you know your answer is correct. Then explain why the other two choices are not correct.