Problem of the Day August

Day 1

Is 4,056 divisible by 2? 3? 4? 5? 6? 8? 9? 10? How do you know? _____

_____

_____

Day 2

Write the expanded form of 23,468,901.04? _____

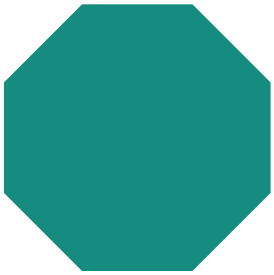
_____

_____

Day 3

How can you find the area of an octagon? Can you think of a formula? What information would you need?

_____



Day 4

What is 78 divided by 0.25? How do you know?

_____

_____

Day 5

What does (10,1) represent on the coordinate plane?

_____

_____

Problem of the Day August

Day 1

What is $\frac{10}{500}$ + 1.1? How did you find your answer?

Day 2

What decimal is equivalent to $\frac{2}{8}$?

Day 3

What is the volume of a rectangular prism that is 6 inches wide, 1 foot tall, and 2 inches in length? _____

Day 4

Find and continue the function table:

Input	6	7	8	9	10	11
Output	14	18	22	_____	_____	_____

Day 5

102 ÷ 3^1 + 9 / 3 - 1? What is a common mistake that someone could make when solving this problem?

Problem of the Day August

Day 1

Fill in the missing exponent and operation symbols to finish the equation.

0^___ + (12_____2____4) = 20

_____

Day 2

A number times 1.6 equals 142.4. What is the number? How did you solve this?

_____

_____

Day 3

What is the area of a rectangle with a length that is two times the width? (Give your answer in "width.")

_____

Day 4

Compare these two numbers using <, >, or =. 256 cm _____ 2500 mm

Day 5

Continue this pattern: 1, 8, 27, 64 ,

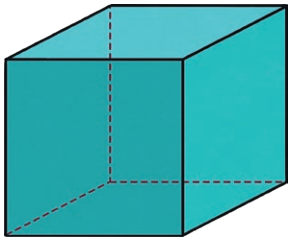
_____, _____, _____,

Problem of the Day August

Day 1

What is the volume of this cube?

$\frac{2}{3}$ yard



_____

Day 2

What is 0.73 renamed as a fraction?

_____

_____

Day 3

Robert spent 0.75 of an hour researching a NASA project. Angela spent $\frac{5}{6}$ hour researching the same project. Who spent a longer amount of time doing research? How much longer? _____

_____

Day 4

Leigh is about to spin a spinner for the board game she is playing. The spinner has eight equal spaces with the numbers one through eight. What is the probability she will spin any number but 3?

_____

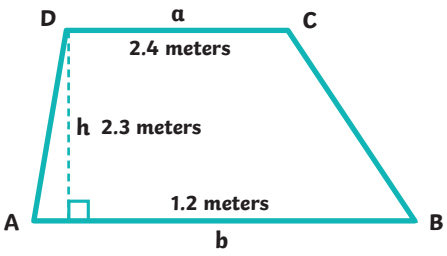
_____

Day 5

Find the area of the trapezoid.

How did you find your answer?

_____



Problem of the Day August **Answer Key**

Week 1

Day 1: **2, 3, 4, 6, 8**

Answers may vary. These are the rules to follow.

2: It ends in an even number.

3: The sum of the digits is divisible by 3.

4: The last two numbers are divisible by 4.

5: The last number is a 0 or 5.

6: The number is also divisible by 2 and 3.

8: The last three numbers are divisible by 8.

9: The sum of the numbers is divisible by 9.

10: The number ends in 0.

Day 2: **2 x 10,000,000 + 3 x 1,000,000 + 4 x 100,000 + 6 x 10,000 + 8 x 1,000 + 9 x 100 + 1 x 1 + 4 x $\frac{1}{100}$.**

Day 3: **Answers may vary. A possible answer is you can divide the octagon into a center rectangle and two trapezoids. A = (l × w) + 2 [(base 1 + base 2)/2 × height]**

Day 4: **312; Divide 7,800 by 25.**

Day 5: **10 points to the right of the origin and 1 point up from the origin**

Week 2

Day 1:**1.12; $\frac{10}{500}$ = $\frac{2}{100}$ = 0.02; 0.02 + 1.1**

Day 2: **0.25**

Day 3: **$\frac{1}{2}$ x 1 x $\frac{1}{6}$ = $\frac{1}{12}$ of a cubic foot**

Day 4: **Find and continue the function table:**

Input	6	7	8	9	10	11
Output	14	18	22	**26**	**30**	**34**

Day 5: **36; solve from left to right in order**

Week 3

Day 1: **0^1 + (12 × 2 - 4) = 20**

Day 2: **89; 142.4 divided by 1.6**

Day 3: **2w × w or 2 widths squared**

Day 4: **256 cm ___>___ 2500 mm**

Day 5: **125, 216, 343**

Problem of the Day August **Answer Key**

Week 4

Day 1: **8 cubic feet**

Day 2: $\frac{73}{100}$

Day 3: **Angela; 5 minutes**

Day 4: $\frac{7}{8}$

Day 5: **4.14 square meters**