

# Problem of the Day February

**Day 1**

What is 1053 divided by 27? \_\_\_\_\_

\_\_\_\_\_

**Day 2**

What is the expanded form of 3,082.24? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Day 3**

How do you find the volume of a rectangular prism if you know the area of the base and the height (but not each side individually)? What is the formula?

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**Day 4**

What is  $9/16$  divided by 2? How do you know?

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**Day 5**

What number is halfway between 100.40 and 100.20? How do you know?

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\_\_\_\_\_

# Problem of the Day February

Day 1

What is  $\frac{2}{5} + 0.8$ ? How did you find your answer?

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Day 2

What decimal is equivalent to  $\frac{1}{8}$  ? \_\_\_\_\_

Day 3

What is the volume of a rectangular prism that is  $\frac{2}{3}$  foot wide, 3 feet tall, and 4 feet in length? \_\_\_\_\_

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Day 4

Find and continue the pattern:

Answer with a base of 5	5	25	125	_____	_____	_____
Exponent	1	2	3	4	5	6

Day 5

Solve  $7 + (21 - 7 \times 2) / 7$ ? What is a common mistake that someone could make when solving this problem?

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# Problem of the Day February

Day 1

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

$$4^{\underline{\quad}} + (11 \underline{\quad} 2) = 86$$

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Day 2

Some number times 4.01 equals 12.03. What is the number? How did you solve this?

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Day 3

Evan uses a 50 pound bag of chocolate chips every two months to make chocolate chip cookies for his bakery. How many pounds of chocolate chips does he use each week? Write your answer in fraction form.

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Day 4

Compare these two numbers using  $<$ ,  $>$ , or  $=$ . 7 feet \_\_\_\_\_ 3.5 yards.

Day 5

Continue this pattern: 1, 0.5, 0.25,

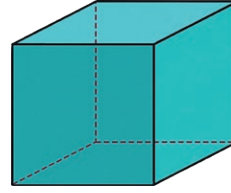
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# Problem of the Day February

Day 1

What is the volume of this cube?

$\frac{5}{6}$  foot



Day 2

What is 2.4 renamed as an improper fraction? How did you solve this?

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Day 3

Renee used the computer for  $\frac{5}{6}$  of an hour. Her sister used the computer for  $\frac{7}{8}$  of an hour. Who used the computer longer? For how much longer? \_\_\_\_\_

Day 4

Phillip's truck gets an average of 22 mpg. He is planning a trip that is 984 miles. Each gallon of gas costs \$3.14. How much money will he spend on gas? \_\_\_\_\_

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Day 5

The area of a triangle is 27 square millimeters. The base is 9 millimeters. What is the height of the triangle? How did you get your answer? \_\_\_\_\_

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# Problem of the Day February Answer Key

## Week 1

Day 1: **39**

Day 2:  **$3 \times 1,000 + 8 \times 10 + 2 \times 1 + 2 \times \frac{1}{10} + 4 \times \frac{1}{100}$**

Day 3: **Multiply the area of the base by the height;  $V = b \times h$**

Day 4:  **$:\frac{9}{32}$ ; to divide by 2, multiply by  $\frac{1}{2}$**

Day 5: **100.30 is halfway between 40 and 20, so 30 hundredths is halfway between 40 and 20 hundredths**

## Week 2

Day 1:  **$\frac{12}{10}$  or  $1 \frac{2}{10}$  or  $1 \frac{2}{10}$ ; change  $\frac{2}{5}$  to 4 tenths and add to 8 tenths**

Day 2: **0.125**

Day 3: **8 cubic feet**

Day 4: **: Find and continue the pattern:**

Answer with a base of 5	5	25	125	625	3,125	15,625
Exponent	1	2	3	4	5	6

Day 5: **8; to not follow the order of operations**

## Week 3

Day 1:  **$4^3 + (11 \times 2) = 86$**

Day 2: **3; divide 12.03 by 4.01**

Day 3:  **$\frac{50}{80}$ ;  $\frac{25}{4}$ ;  $6 \frac{1}{4}$  pounds**

Day 4: **17 feet  $>$  3.5 yards**

Day 5: **1, 0.5, 0.25, 0.125, 0.0625, 0.03125**

## Week 4

Day 1:  **$\frac{125}{216}$  cubic feet**

Day 2:  **$\frac{24}{10}$  or  $\frac{12}{5}$ ; changed 2.4 to  $2 \frac{4}{10}$ , multiplied the denominator by the whole number and added the numerator to get the new numerator**

Day 3: **Renee's sister; by  $\frac{1}{24}$  hour longer**

Day 4: **\$140.44**

Day 5: **6 millimeters; divide 27 by 9 to get 3 then multiply by 2**