

# Problem of the Day December

**Day 1**

What is  $7\frac{1}{2}$  divided by  $2\frac{1}{2}$ ? How do you know? \_\_\_\_\_

\_\_\_\_\_

**Day 2**

Explain how to solve  $4.8 \times 1.2$ . Solve. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Day 3**

What is the difference between the metric and customary systems of measurement?

\_\_\_\_\_

\_\_\_\_\_

**Day 4**

For Christmas, Katie is making sugar cookies. The recipe requires  $1\frac{5}{8}$  cups of sugar. Martha is making cookies for Hanukkah, and her recipe requires  $1\frac{2}{3}$  cups of sugar. Who added more sugar? How do you know? \_\_\_\_\_

\_\_\_\_\_

**Day 5**

The book Joseph is reading is 335 pages. There are 15 chapters. What is a good estimate of how many pages are in each chapter? How did you estimate your answer?

\_\_\_\_\_

\_\_\_\_\_

# Problem of the Day December

Day 1

What is an equivalent fraction to 0.06? How do you know? Can you think of another equivalent fraction to 0.06?

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Day 2

What decimal represents  $\frac{1}{4}$  ?

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Day 3

Name three units of measurement in the metric system? What does each measure (distance, mass, volume)?

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Day 4

Find and continue the pattern:

Amount of math word problems for homework in each grade	1	2	4			
Serving(s)	1	2	3	4	5	6

Day 5

What is the difference between a pyramid and a cylinder?

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# Problem of the Day December

**Day 1**

Mr. Rodriguez used  $3\frac{3}{8}$  reams of paper during the school year. Mr. Miller used  $4\frac{2}{3}$  reams of paper during the school year. How much more paper did Mr. Miller use than Mr. Rodriguez? Explain how you solved the problem. \_\_\_\_\_

\_\_\_\_\_

**Day 2**

A number times 6 equals 24.12. What is the number? How did you solve this?

\_\_\_\_\_

\_\_\_\_\_

**Day 3**

Fill in the missing number:  $5.23 + 4 + \underline{\hspace{2cm}} = 29$

**Day 4**

Compare these two numbers using  $<$ ,  $>$ , or  $=$ .  $17.1 \text{ mL} \underline{\hspace{2cm}} 17.01 \text{ mL}$

**Day 5**

Continue this pattern: 121, 132, 143,

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

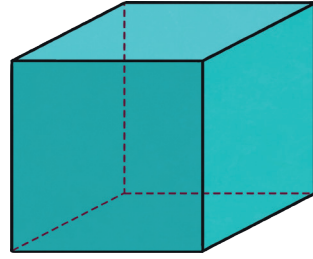
# Problem of the Day December

Day 1

What is the volume of this cube?

\_\_\_\_\_

1 meter



Day 2

What is  $\frac{107}{8}$  renamed as a mixed number? How did you solve this?

\_\_\_\_\_  
\_\_\_\_\_

Day 3

There are 308 days until Martha's birthday. How many weeks until her birthday?

\_\_\_\_\_

Day 4

Mark is painting 4 rooms. Each room requires  $2\frac{1}{6}$  quarts of paint. How much paint will he need? Write your answer in an improper fraction and a mixed number.

\_\_\_\_\_  
\_\_\_\_\_

Day 5

The volume of a dice is 8 cubic millimeters. What is the length of one side? How did you get your answer? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

# Problem of the Day December Answer Key

## Week 1

Day 1: **3; 7.5 divided by 2.5 is 3**

Day 2: **Multiply 48 and 12, and then make sure the answer has two numbers behind the decimal. 5.76**

Day 3: **The metric system is based on units of ten, while the customary is not.**

Day 4: **Martha;  $1\frac{2}{3} = 1\frac{16}{24}$ ;  $1\frac{5}{8} = 1\frac{15}{24}$**

Day 5: **20 pages; 335 is about 300 and 300 divided by 15 is 20**

## Week 2

Day 1:  **$\frac{6}{100}$ ; because the decimal is read "six hundredths";  $\frac{3}{50}$**

Day 2: **0.25**

Day 3: **meters (distance); liters (volume); grams (mass)**

Day 4: **8, 16, 32**

Day 5: **A pyramid has one base. A cylinder has two circular bases.**

## Week 3

Day 1:  **$1\frac{7}{24}$ ; Subtract  $3\frac{9}{24}$  from  $4\frac{16}{24}$  (24 is the LCM)**

Day 2: **4.02; 24.12 divided by 6**

Day 3: **19.77**

Day 4: **17.1 \_\_\_\_\_ > \_\_\_\_\_ 17.01**

Day 5: **154, 165, 176, 187, 198**

## Week 4

Day 1: **cubic meter**

Day 2:  **$13\frac{3}{8}$ ; divide 107 by 8; The quotient is the whole number. The remainder is the numerator.**

Day 3: **44 weeks**

Day 4:  **$\frac{26}{3}$  or  $\frac{52}{6}$ ;  $8\frac{4}{6}$  or  $8\frac{2}{3}$**

Day 5: **2 millimeters; Decide what number multiplied by itself three times equals 8.**