PLACE VALUE

1. Frank said that $\frac{97}{1,000}$ can be written as 0.97. Is this correct? If not, justify your reasoning.

2. Paco has $300. June has $\frac{1}{10}$ as much money as Paco. She has 10 times as much money as Marie.
   How much money does June have? How much money does Marie have?

3. Write in expanded form: **356,940.345**
   How many times greater is the 4 in the tens place than the 4 in the hundredths place?

4. A number has a 6 in the hundred thousands place. You multiply it by 100.
   In what place will the 6 be in the product? Explain your reasoning.

DECIMAL OPERATIONS

5. Estimate the product of the following problems:

       4.2 x 5.7   10.72 x 5.3   7.5 x 0.9   3.5 x 6.5

6. A customer's purchase receipt from a supermarket showed the following prices for various items.
   £3.48 , £8.76 , £11.29 , £19.17. Estimate the total cost of the items.

7. A motorcycle racer completed three laps in the times shown below.
   - 43.28 seconds
   - 42.8 seconds
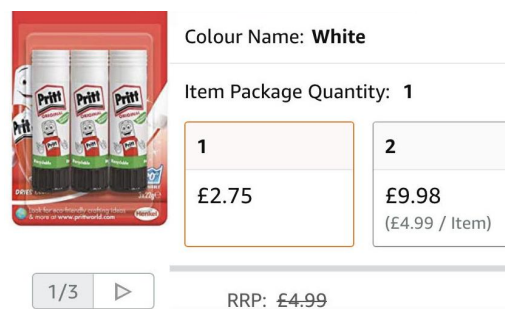   - 41.74 seconds

   What was the total time, in seconds, it took for the driver to complete the three laps?

8. Kathy has one cat that is 10.6 cm tall. She has another cat that is 6.8 cm tall.
   How much taller is one cat than the other?

9. A living room rug is 5.5 meters long and 2.3 meters wide. Draw and label a model of the rug and use it to find the area of the rug.

10. Are these good deals or bad deals? Why? *Can you find some good deal/bad deal examples in the real world? If you do, email a photo of it to Mrs. Spurr and Ms. Yeo so we can share them with kids next year!*

Screenshot from James B.

11. An organic farm opened a kiosk to sell their vegetables.

a) A customer buys 8 cucumbers, 1 pound of tomatoes and 10 zucchini. How much money did he spend?

Vegetable	Price
cucumbers	$0.50 each or $3.75 for a bag of 10
tomatoes	$1.98 for 1lb or $3.55 for 2 lb
zucchini	$0.60 each or $5.59 for a dozen

b) Based on the money he spent, show one way the customer could have purchased more vegetables for less money.

12. An artist is selling children's jewelry. Necklaces cost £2.25 each. Bracelets cost £1.50 each. Select all the combinations of necklaces and bracelets that would cost exactly £12.

5 necklaces, 1 bracelet   2 necklaces, 5 bracelets   3 necklaces, 3 bracelets   4 necklaces, 2 bracelets

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WHOLE NUMBER MULTIPLICATION, DIVISION AND ORDER OF OPERATIONS

13. Use the Distributive Property to complete the equation.

$559 \times 3 = (500 + 50 + 9) \times 3$

$= (500 \times \underline{\quad}) + (50 \times \underline{\quad}) + (9 \times \underline{\quad})$

$= \underline{\quad} + \underline{\quad} + 27$

$= \underline{\quad}$

14. Solve using the order of operations: Parentheses, Exponents, Multiplication or Division *(from left to right)*, Addition or Subtraction *(from left to right)*

      8 + 18 ÷ 9 - 5   3 x 12 ÷ 4 + 11   32 - (4 + 6) x 2

      2 + 5 x 8 ÷ 2 $(158 – 12^2)$ x 2 + 225   (15 - 11) + 24 ÷ 2^3

15. Make the number 24. You can add, subtract, multiply and divide but you don't have to use all four operations. You must each number on the card exactly once. Write your solution with an expression that follows the order of operations. *Here's a website that has more 24 challenges if you like them!*

16. Insert parentheses to make the statements true

      3 + 2 x 6 – 4 = 10   7 + 30 - 5^2 x 3 = 22   64 ÷ 2 x 4 ÷ 2 = 4

17. A nursery sells plants in flats. Each flat holds 6 trays and each tray holds 8 plants. The nursery sold 18 flats on Saturday and 21 flats on Sunday. How many plants did the nursery sell in all?

18. Maggie's Farm has 380 peaches ready to sell. If 15 peaches fit in each crate, how many crates can be filled?

19. On a field trip, there should be one adult chaperone for every 9 students. If 164 students are going on the trip, how many adult chaperones are needed? Explain how you found your answer.

20. Chris is saving up to take her whole family (including her grandparents) out to dinner. She wants to save $230 and takes up a dog-walking job. She gets paid $8 for each time she walks her neighbor's dog. How many times will she need to walk the dog?

FRACTION OPERATIONS

21. Dena is biking down a $\frac{3}{4}$ mile bike trail. She stops to talk to a friend after biking $\frac{1}{5}$ of a mile. How much farther does she need to travel?

22. A rectangular poster is $\frac{1}{4}$ yard wide by $\frac{6}{7}$ yard tall. What is its area?

23. The shaded area is $2\frac{2}{3}$. The top bar is half the shaded area, the bottom bar is double. What are they worth?

24. Mrs. Jois wants to make a pan of carrot halwa bars.

    a) The recipe makes 24 bars, but she only wants to make 16 bars. How much of each ingredient will she need?

    2 cups all-purpose flour

    3 teaspoons double acting baking powder

    2 cups shredded carrots

    ½ cup whole milk

    5 tablespoons sugar

    ½ cup raisins

    one 14-ounce can condensed milk

    8 tablespoons unsalted butter, melted

    5 to 7 pods cardamom seeds, crushed

    ⅛ teaspoon ground nutmeg
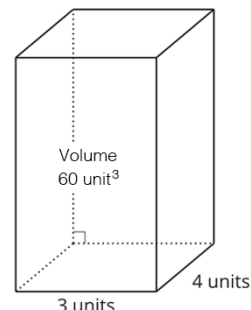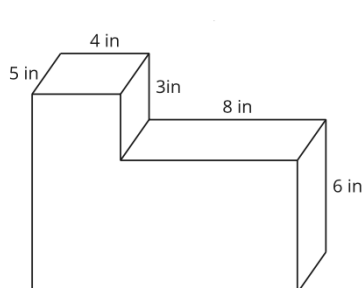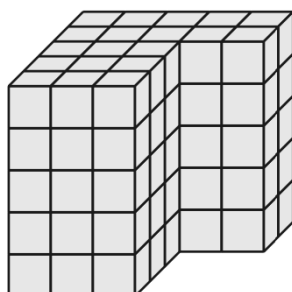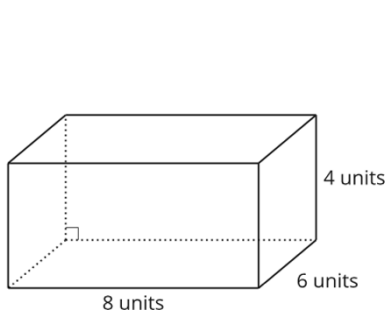
    ½ cup slivered almonds

    b) She brings half of the bars she makes to school to share with the Grade 5 teachers and leaves the rest at home for her family. Her husband eats a quarter of the bars that were left at home. How many bars are left for the rest of her family?

VOLUME

25. How much sand is needed to fill a pit that is 10 m deep and 8 m wide and 12 m long?

26. Andy has 64 one-inch cubes. The cubes measure 1 inch on each edge. How many rectangular prisms, each with different dimensions, can he make using all of the one-inch cubes?

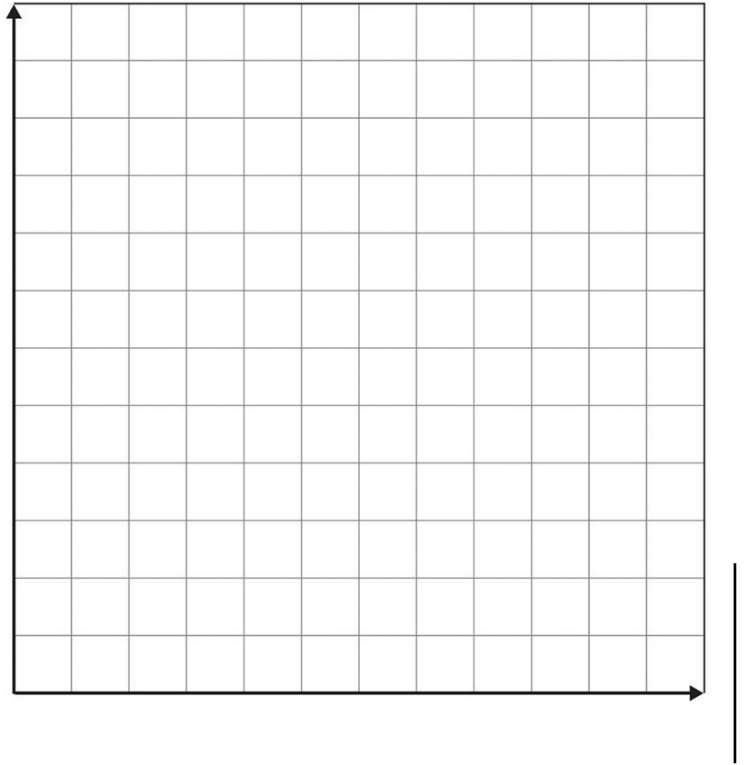27. Find the missing values in the following shapes.

Volume = _____ unit^3 Volume = _____ unit^3 Volume = _____ in^3 Height = _____ units

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COORDINATE PLANE / DATA

Let's get moving! Set a timer for thirty seconds. Do as many jumping jacks as you can. As you rest for thirty seconds, record your results in the table. Repeat this nine more times.

Graph your results below. Be sure to give the graph a title and label the x and y axis. Remember to think about what the scale should be for the y axis.

Attempt	# of jumps
0	0
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

What patterns do you see in your data?