

MATH MADNESS # 50

1. How many zeros must be in the product of the expression shown below?

$$10^3 \times 10^2$$

- a. 1
- b. 5**
- c. 6
- d. 7

5. Which equation describes the relationship between the patterns?

$$C = 0, 8, 16, 24, 32$$

$$D = 0, 2, 4, 6, 8$$

- a. $D = 4 + C$
- b. $D = 4 - C$
- c. $D = \frac{1}{4} \div C$
- d. $D = \frac{1}{4} \times C$**

2. Terrance ran a 10-mile race. After running $\frac{3}{4}$ of the race he stopped for water. After finishing the water, how much farther did Terrance have to run?

- a. 2 miles
- b. $2\frac{1}{2}$ miles**
- c. 7 miles
- d. $7\frac{1}{2}$ miles

6. Finn drew an equilateral triangle with a perimeter of 24 **centimeters**. What is the length of each side of the triangle in **meters**?

- a. 0.008
- b. 0.08**
- c. 0.8
- d. 8

Helpful Hint: 1 m = 100 cm

3. On Mars, your weight is about $\frac{1}{3}$ your weight on Earth. If Mr. Leeper weighs 156 pounds on Earth, about how much would he weigh on Mars?

- a. 52 pounds**
- b. 78 pounds
- c. 153 pounds
- d. 468 pounds

7. The chart below shows the information for a rectangular prism.

| Length | Width | Height | Volume |
|--------|----------|--------|--------------|
| 5 ft | x | 7 ft | 280 cubic ft |

What is the width of the rectangular prism?

- a. 5 ft
- b. 6 ft
- c. 7 ft
- d. 8 ft**

Helpful Hint: $V = l \times w \times h$

4. Which expression is equivalent to the number sentence below?

fourteen less than three times a number

- a. $14 - 3a$
- b. $3a + 14$
- c. $3a - 14$**
- d. $14 + 3a$

8. Joy made this pictograph to show the number of beach balls she sold over three days.

| Beach Ball Sales | |
|--|---|
| Friday |  |
| Saturday |  |
| Sunday |  |
| Key:  = 5 beach balls | |

There **must** be an error in Joy's pictograph because it shows:

- a. she sold fewer beach balls on Sunday than Friday
- b. she sold more beach balls on Friday than Saturday
- c. she sold 10 beach ball on Saturday
- d. she sold $12\frac{1}{2}$ beach balls on Friday**

9 & 10 (2 points) Short Answer / Extended Response

A punch bowl holds 3 liters of punch. Beverly's fruit punch recipe calls for 1,600 milliliters of orange juice, 600 milliliters of lemon-lime soda, and 500 milliliters of raspberry juice. Will Beverly's fruit punch fit in the punch bowl? Explain your thinking.

Yes, the punch will fit in the punch bowl. ($1,600 \text{ mL} + 600 \text{ mL} + 500 \text{ mL} = 2,700 \text{ mL} = 2.7 \text{ liters}$)