MATH MADNESS #100
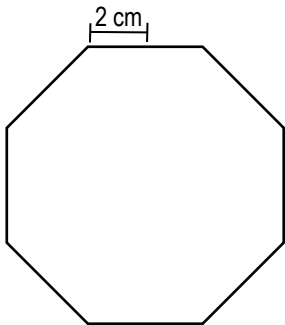
1. Which of the following fractions would make this statement true?

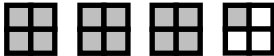 $$\frac{1}{2} \neq \underline{\hspace{2cm}}$$
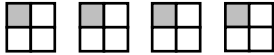
   a. $\frac{2}{8}$ c. $\frac{5}{10}$

   b. $\frac{2}{4}$ d. $\frac{3}{6}$

5. A regular polygon is a polygon in which all sides are the same length. What is the perimeter of the regular octagon shown?

   |← 2 cm →|

   a. 8 cm   c. 24 cm
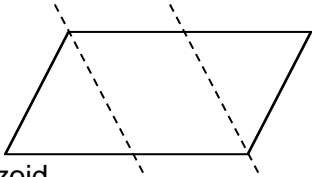   b. 16 cm   **d. 32 cm**

2. Which model is shaded to show $\frac{13}{4}$?

   a.
   b.
   c.
   d.

6. Steve drew 2 dashed lines through the polygon below.

   Which best describes the resulting polygons?

   a. 2 triangles and 1 trapezoid
   b. 2 quadrilaterals and 1 trapeziod
   c. 2 triangles and 1 quadrilateral
   d. 2 quadrilaterals and 1 rhombus

3. Dawn has 576 pennies in her piggy bank. Laura has 205 more pennies in her piggy bank than Dawn. How many pennies do they have in all?

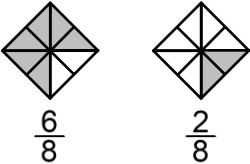   a. 371
   b. 781
   c. 1,371
   d. 1,357

7. Mora made this pictograph to show the number of stars she saw on Friday and Saturday night. If Mora saw 36 stars on Friday and 24 stars on Saturday night, how many stars does each symbol (☆) on the chart represent?

   a. 4
   b. 6
   c. 8
   d. 9

Stars in the Sky	
Friday	☆ ☆ ☆ ☆ ☆ ☆
Saturday	☆ ☆ ☆ ☆

4. What is $\frac{6}{8} + \frac{2}{8}$?

   a. $\frac{4}{16}$
   b. $\frac{8}{16}$
   c. 1
   d. $1\frac{1}{2}$

   $\frac{6}{8}$ $\frac{2}{8}$

8. This table shows the number of crayons in different numbers of boxes. If the pattern in the table continues in the same way, which of the following should be used to determine how many crayons are in 6 boxes?

   a. 6 × 16
   b. 6 + 16
   c. 6 + 64
   d. 6 × 64

Boxes of Crayons	Number of Crayons
1	16
2	32
3	48
4	64

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

Brett will make a snow cone. He can choose 1 type of ice and 1 syrup flavor. The chart shows his choices.

Ice	Syrup Flavor
Shaved	Cherry
Crushed	Grape
	Lemon

How many combinations can he make? __6__

List all possible combinations Brett can make.

1. shaved ice / cherry   4. crushed ice / cherry

2. shaved ice / grape   5. crushed ice / grape

3. shaved ice / lemon   6. crushed ice / lemon

_____   _____