From Our Home to Yours, Have a Magical, Mathematical Holiday Season!



BAKING ACTIVITY: SUGAR COOKIES WITH ICING (Upper Elementary)

INGREDIENTS FOR COOKIES:

42 ÷ 12 = ____ cup(s) all-purpose flour
 4 ÷ 4 = ____ teaspoon(s) baking powder
 ½ + ½ = ___ teaspoon(s) kosher salt
 15 ÷ 10 = ___ stick(s) of unsalted butter at room temperature
 20 ÷ 16 = ___ cup(s) granulated sugar
 16 ÷ 8 = ___ large egg(s)
 (5 x 2) ÷ 10 = ___ teaspoon(s) vanilla extract

INGREDIENTS FOR ICING:

2% of 150 = ____ large egg white(s)

15% of 25 = ____ cup(s) confectioner's sugar

16% of 200 = ____ teaspoon(s) cream of tartar

16% of 50 = ____ teaspoon(s) kosher salt

Food coloring (optional)

DIRECTIONS FOR COOKIES:

- 1. Preheat oven to **25** x **13** = ____ degrees F (**89** + **34** + **40** = ___ degrees C).
- 2. In a large bowl, beat together butter and sugar until fluffy for $12 \div 6 =$ ____ to $21 \div 7 =$ ___ minute(s). Scrape down sides of the bowl and add egg(s) $5 \times 1 4 =$ ___ at a time. Add vanilla and beat until everything is well combined.
- 3. In another bowl, whisk together flour, baking powder and salt. Add dry ingredients to wet ingredients all at once and mix until incorporated. Scrape dough out of bowl and wrap in plastic wrap. Chill at least $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} =$ ____ hour(s) and up to $2 \cdot \frac{1}{2} \times 2 =$ ____ day(s).
- 4. Lightly flour a surface and roll out dough until it's about $\frac{1}{2} \div 4 = \underline{\hspace{1cm}}$ inch(es) thick. Create shapes, using a lightly floured cookie cutter or knife.
- 5. Place shapes onto parchment-lined baking sheets **33 8 x 4 =** ____ inch(es) apart and bake for **4 + 4 + 4 =** ____ to **6 x 3 3 =** ____ minute(s), rotating the sheets halfway through. Cool the cookies on a rack. Decorate with icing and whatever else you'd like.

DIRECTIONS FOR ICING:

- 1. Using an electric mixer, whisk egg whites until light and foamy, about **0.25 x 4 =** ____ minute(s). Add powdered sugar, cream of tartar and salt to egg white(s) and continue to whisk.
- 2. Thin icing with $2 \times 5 7 = \underline{}$ to $16 \div 2 \div 2 = \underline{}$ tablespoon(s) of water or until it is as thick as hot fudge.

Add food coloring, if desired. Keep covered until ready to use.