

# Daily Math

## Week 2 (2013-2014)

Mon. August 26, 2013

Tues. August 27, 2013

Wed. August 28, 2013

Thurs. August 29, 2013

Fri. August 30, 2013

Monday, August 26, 2013

1<sup>st</sup>

Order from **greatest to least**:

$\frac{1}{3}$ , 0.3, 0.33

Monday, August 26, 2013

1<sup>st</sup>

Order from **greatest to least**:

$\frac{1}{3}$ , 0.3, 0.33

Answer:  $\frac{1}{3}$ , **0.33**, **0.3**

Monday, August 26, 2013

2<sup>nd</sup>

Simplify:

$$\frac{4}{8} + \frac{1}{8}$$

Monday, August 26, 2013

2<sup>nd</sup>

Simplify:

$$\frac{4}{8} + \frac{1}{8}$$

Answer:

$$\frac{5}{8}$$

Monday, August 26, 2013

3<sup>rd</sup>

If  $a = 3$  and  $b = 0$ , then

$$2a - 3b = ?$$

Monday, August 26, 2013

3<sup>rd</sup>

If  $a = 3$  and  $b = 0$ , then

$$2a - 3b = ?$$

Answer:  $2(3) - 3(0)$

$$6 - 0$$

**6**

Monday, August 26, 2013

4<sup>th</sup>

Write five fractions that are equal to one-quarter.



Monday, August 26, 2013

4<sup>th</sup>

Write five fractions that are equal to one-quarter.

Some possible answers:

$$\frac{1}{4}, \frac{2}{8}, \frac{3}{12}, \frac{4}{16}, \frac{5}{20}, \dots$$

Monday, August 26, 2013

5<sup>th</sup>

Simplify:

$$4(10 + 2)$$

Monday, August 26, 2013

5<sup>th</sup>

Simplify:

$$4(10 + 2)$$

Answer:  $4(10 + 2)$

$$4(12)$$

**48**

Monday, August 26, 2013

6<sup>th</sup>

Simplify:

$$4^2 - 1$$

Monday, August 26, 2013

6<sup>th</sup>

Simplify:

$$4^2 - 1$$

Answer:  $4^2 - 1$

$$16 - 1$$

**15**

Monday, August 26, 2013

7<sup>th</sup>

Solve:

$$x + 3 = 8$$

Monday, August 26, 2013

7<sup>th</sup>

Solve:

$$x + 3 = 8$$

Answer:

$$x + 3 = 8$$

$$x + 3 - 3 = 8 - 3$$

$$x = 5$$

Tuesday, August 27, 2013 1<sup>st</sup>

Find the next two numbers in the following pattern:

2, 4, 8, \_\_\_\_\_, \_\_\_\_\_



Tuesday, August 27, 2013 1<sup>st</sup>

Find the next two numbers in the following pattern:

2, 4, 8, \_\_\_\_\_, \_\_\_\_\_

Answer: 2, 4, 8, **16, 32**

Tuesday, August 27, 2013

2<sup>nd</sup>

Simplify:

$$\frac{1}{2} + \frac{1}{4}$$

Tuesday, August 27, 2013

2<sup>nd</sup>

Simplify:

$$\frac{1}{2} + \frac{1}{4}$$

Answer:

$$\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4}$$

$$\frac{3}{4}$$

Tuesday, August 27, 2013

3<sup>rd</sup>

If  $a = 8$  and  $b = 2$ , then

$$a - 3b =$$

Tuesday, August 27, 2013

3<sup>rd</sup>

If  $a = 8$  and  $b = 2$ , then

$$a - 3b =$$

Answer:

$$a - 3b =$$

$$8 - 3(2) = 8 - 6$$

$$2$$

Tuesday, August 27, 2013

4<sup>th</sup>

A stick of butter contains 8 tablespoons of butter. What percent of a stick of butter is being used if 6 tablespoons of butter are used to cook?

Tuesday, August 27, 2013

4<sup>th</sup>

A stick of butter contains 8 tablespoons of butter. What percent of a stick of butter is being used if 6 tablespoons of butter are used to cook?

Answer:

$$\frac{\textit{part}}{\textit{whole}} = \frac{x\%}{100\%}$$

$$\frac{6 \textit{ tablespoons}}{8 \textit{ tablespoons}} = \frac{x}{100}$$

$$100(6) = 8x = 600$$

$$\frac{600}{8} = x = 75$$

**75%**

Tuesday, August 27, 2013

5<sup>th</sup>

Solve for  $x$ :

$$x + 4 = 12$$



Tuesday, August 27, 2013

5<sup>th</sup>

Solve for  $x$ :

$$x + 4 = 12$$

Answer:

$$x + 4 = 12$$

$$x + 4 - 4 = 12 - 4$$

$$**x = 8**$$

Tuesday, August 27, 2013

6<sup>th</sup>

Divide and round to the nearest tenth:

$$46 \div 3$$

Tuesday, August 27, 2013

6<sup>th</sup>

Divide and round to the nearest tenth:

$$46 \div 3$$

Answer:

$$46 \div 3$$

$$(45 + 1) \div 3$$

$$\frac{45}{3} + \frac{1}{3}$$

$$15 + 0.3333 \dots$$

**15.3**

Tuesday, August 27, 2013

7<sup>th</sup>

Simplify:

$$3(2 + 4) - 2$$

Tuesday, August 27, 2013

7<sup>th</sup>

Simplify:

$$3(2 + 4) - 2$$

Answer:  $3(2 + 4) - 2$

$$3(6) - 2$$

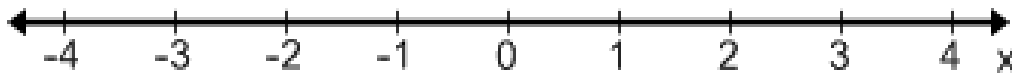
$$18 - 2$$

**16**

Wednesday, August 28, 2013

1<sup>st</sup>

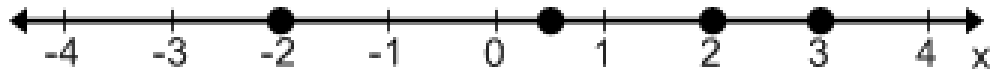
Place the following numbers in order  
on the number line:  $2, 5, -2, \frac{1}{2}$



Wednesday, August 28, 2013 1<sup>st</sup>

Place the following numbers in order  
on the number line:  $2, 5, -2, \frac{1}{2}$

Answer:



Wednesday, August 28, 2013 **2nd**

**Simplify:**

$$\frac{1}{3} + 1\frac{1}{3}$$



Wednesday, August 28, 2013 2nd

Simplify:

$$\frac{1}{3} + 1\frac{1}{3}$$

Answer:

$$\begin{array}{r} \frac{1}{3} + 1\frac{1}{3} \\ 1 + \frac{1}{3} + \frac{1}{3} \\ \mathbf{1\frac{2}{3}} \end{array}$$

Wednesday, August 28, 2013 **3rd**

Simplify:

$$144 \div 4$$

Wednesday, August 28, 2013 3rd

Simplify:

$$144 \div 4$$

Answer:

$$144 \div 4$$

$$(100 + 44) \div 4$$

$$\frac{100}{4} + \frac{44}{4} = 25 + 11$$

**36**

Wednesday, August 28, 2013 4th

Robert has a coupon for 15% off his total lunch bill. If the total bill is \$30, how much will he save from the coupon?

Wednesday, August 28, 2013 4th

Robert has a coupon for 15% off his total lunch bill. If the total bill is \$30, how much will he save from the coupon?

Answer: Savings = 15% of \$30

$$0.15(30) = \mathbf{\$4.50}$$

Wednesday, August 28, 2013

5<sup>th</sup>

Simplify:

$$2 + 3(9 - 5)$$

Wednesday, August 28, 2013

5<sup>th</sup>

Simplify:

$$2 + 3(9 - 5)$$

Answer:  $2 + 3(9 - 5)$

$$2 + 3(4)$$

$$2 + 12$$

**14**

Wednesday, August 28, 2013

6<sup>th</sup>

Compare:

$$0.25 \quad \underline{\hspace{1cm}} \quad \frac{1}{3}$$



Wednesday, August 28, 2013

6<sup>th</sup>

Compare:

$$0.25 \text{ — } \frac{1}{3}$$

Answer:  $\frac{1}{3} \approx 0.33$

$$0.25 < \frac{1}{3}$$

Wednesday, August 28, 2013

7<sup>th</sup>

Simplify:

$$\sqrt{36}$$

Wednesday, August 28, 2013

7<sup>th</sup>

Simplify:

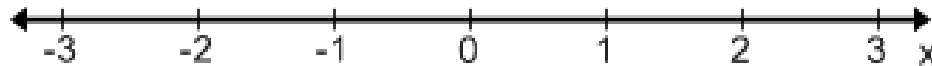
$$\sqrt{36}$$

Answer: **6** (since  $6^2 = 36$ )

Thursday, August 29, 2013

1st

Place the following in order on the number line:  $-1, \frac{1}{3}, \frac{1}{2}, -\frac{1}{2}$

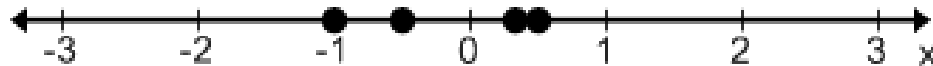


Thursday, August 29, 2013

1st

Place the following in order on the number line:  $-1, \frac{1}{3}, \frac{1}{2}, -\frac{1}{2}$

Answer:



Thursday, August 29, 2013

2nd

Simplify:

$$\sqrt{4} + 5$$

Thursday, August 29, 2013

2nd

Simplify:

$$\sqrt{4} + 5$$

Answer:  $\sqrt{4} + 5$

$$2 + 5$$

**7**

Thursday, August 29, 2013

3rd

Compare:

$$6 \text{ \_\_\_\_ } \sqrt{35}$$



Thursday, August 29, 2013

3rd

Compare:

$$6 \text{ \_\_\_\_ } \sqrt{35}$$

Answer:  $6 \text{ \_\_\_\_ } \sqrt{35}$

$$\sqrt{36} > \sqrt{35}$$

$$6 > \sqrt{35}$$

Thursday, August 29, 2013 4th

Kendra ordered a lunch item for \$8.  
The sales tax is 7%. How much will she  
pay for lunch?

Thursday, August 29, 2013

4th

Kendra ordered a lunch item for \$8.  
The sales tax is 7%. How much will she  
pay for lunch?

$$\begin{aligned}\text{Answer: } \$8 + 7\% \text{ of } \$8 &= \$8 + 0.07(\$8) \\ &= \$8 + \$0.56 = \mathbf{\$8.56}\end{aligned}$$

$$\text{or } \$8 (100\% + 7\%) = \$8(107\%) = \$8(1.07) = \mathbf{\$8.56}$$

Thursday, August 29, 2013

5th

Find the next two numbers in the following pattern:

8, 12, 17, 23, \_\_\_\_\_, \_\_\_\_\_

Thursday, August 29, 2013

5th

Find the next two numbers in the following pattern:

8, 12, 17, 23, \_\_\_\_\_, \_\_\_\_\_

Answer: 8, 12, 17, 23, **30**, **38**

Thursday, August 29, 2013

6th

Simplify:

$$\frac{3}{5} + \frac{2}{3} - \frac{1}{15}$$

Thursday, August 29, 2013

6th

Simplify:

$$\frac{3}{5} + \frac{2}{3} - \frac{1}{15}$$

Answer:

$$\frac{3}{5} + \frac{2}{3} - \frac{1}{15}$$
$$\frac{9}{15} + \frac{10}{15} - \frac{1}{15} = \frac{9+10-1}{15} = \frac{18}{15}$$
$$\frac{6}{5}$$

Thursday, August 29, 2013

7th

Simplify:

$$\frac{2}{3} \cdot \frac{3}{4}$$



Thursday, August 29, 2013

7th

Simplify:

$$\frac{2}{3} \cdot \frac{3}{4}$$

Answer:

$$\frac{2}{3} \cdot \frac{3}{4}$$
$$\frac{2}{3} \cdot \frac{3}{4} = \frac{2}{4}$$
$$\frac{1}{2}$$

Friday, August 30, 2013

**1st**

Salvador bought a shirt marked 20% off. If the regular price was \$28, what was the sale price?

Friday, August 30, 2013

1st

Salvador bought a shirt marked 20% off. If the regular price was \$28, what was the sale price?

Answer:  $\$28 - 20\%$  of  $\$28$

$$\$28 - 0.20(\$28) = \$28 - \$5.60$$

**\$22.40**

Friday, August 30, 2013

**2nd**

Ross has 30% off all dresses. If a dress regularly sells for \$30, how much will you save?

Friday, August 30, 2013

2nd

Ross has 30% off all dresses. If a dress regularly sells for \$30, how much will you save?

Answer: Save 30% of \$30

$$0.30(\$30)$$

**\$9**

Friday, August 30, 2013

**3rd**

An airline ticket costs \$320 without the tax. If the tax rate is 5%, what is the total cost for the airline ticket?

Friday, August 30, 2013

3rd

An airline ticket costs \$320 without the tax. If the tax rate is 5%, what is the total cost for the airline ticket?

Answer: Cost is 100% + 5% tax  
= (100% + 5%) \$320  
= (105%)\$320 = 1.05 (\$320)  
**\$336**

Friday, August 30, 2013

4th

Over a period of time, the price of gas goes up by 10% and then down by 10%. Is the new price (more than, less than, or the same as) the original price?



# Friday, August 30, 2013

# 4th

Over a period of time, the price of gas goes up by 10% and then down by 10%. Is the new price (more than, less than, or the same as) the original price?

Answer:

(Old price) (100% + 10%) = 1.10 (Old Price)

Then, 1.10 (Old Price) (100% - 10%) =

1.10 (Old Price) (0.90) = 0.99 (Old Price)

New Price < Old Price

**Less than**

Friday, August 30, 2013

**5th**

Gabriella made \$16,000 last year and received a 6% raise. How much does she make now?

Friday, August 30, 2013

5th

Gabriella made \$16,000 last year and received a 6% raise. How much does she make now?

Answer:  $(100\% + 6\%) \$16,000$

$1.06 (16,000)$

**\$16,960**

Friday, August 30, 2013

6th

Marla has \$30 to spend on a dress. She finds a \$34 dress with a 20% off tag. Tax on the sale price will be 7%. Does she have enough money for the dress?

Friday, August 30, 2013

6th

Marla has \$30 to spend on a dress. She finds a \$34 dress with a 20% off tag. Tax on the sale price will be 7%. Does she have enough money for the dress?

Answer:     \$34 (100%-20%) (100%+7%)  
                  \$34 (0.80) (1.07)  
                  \$29.10

**Yes, she has enough money**

Friday, August 30, 2013

7th

What is half of 40% of 30?

Friday, August 30, 2013

7th

What is half of 40% of 30?

Answer:  $(0.50) (0.40) (30)$

6