Daily Math
Week 4 (2013-2014)

Mon. September 9, 2012
Tues. September 10, 2012
Wed. September 11, 2012
Thurs. September 12, 2012
Fri. September 13, 2012

Monday, Sept. 9th, 2013 1st

Order from **greatest** to **least**:

$$\frac{1}{18}, \frac{2}{9}, \frac{1}{3}$$

Monday, Sept. 9th, 2013

1st

Order from **greatest** to **least**:

$$\frac{1}{18}, \frac{2}{9}, \frac{1}{3}$$

Answer: $\mathbf{\frac{1}{3}, \frac{2}{9}, \frac{1}{18}}$

Monday, Sept. 9th, 2013 2nd

In the first quarter of a game, a football team gained 20 yards, lost 15 yards, lost 3 yards, and then gained another 7 yards. What was their total loss or gain?

Monday, Sept. 9th, 2013 2^{nd}

In the first quarter of a game, a football team gained 20 yards, lost 15 yards, lost 3 yards, and then gained another 7 yards. What was their total loss or gain?

Answer: $20 - 15 - 3 + 7$

$5 - 3 + 7$

$2 + 7 = \mathbf{9}$ **yards gained**

Monday, Sept. 9th, 2013 3rd

Eric bought a block of fudge that weighed 1/2 of a pound. He cut the fudge into 4 equal pieces. What was the weight of each piece of fudge?

Monday, Sept. 9th, 2013 3rd

Eric bought a block of fudge that weighed 1/2 of a pound. He cut the fudge into 4 equal pieces. What was the weight of each piece of fudge?

Answer: $\frac{1}{2} \div 4$

$\frac{1}{2} \times \frac{1}{4} = \mathbf{\frac{1}{8}}$ **pound**

Monday, Sept. 9th, 2013

4^{th}

Simplify:

$$20 - 3^2 - 2(4 - 3)$$

Monday, Sept. 9th, 2013

4^{th}

Simplify:

$$20 - 3^2 - 2(4 - 3)$$

Answer: $20 - 3^2 - 2(4 - 3)$

$20 - 3^2 - 2(1)$

$20 - 9 - 2$

$11 - 2 = \mathbf{9}$

Monday, Sept. 9th, 2013

5^{th}

Write $\frac{1}{12}$ as a decimal.

Monday, Sept. 9th, 2013

5^{th}

Write $\frac{1}{12}$ as a decimal.

Answer: $\frac{1}{12} = 1 \div 12$

$= \mathbf{0.08\overline{3}}$

Monday, Sept. 9th, 2013

6^{th}

Simplify $\frac{9}{27}$

Monday, Sept. 9th, 2013

6^{th}

Simplify $\frac{9}{27}$

Answer: $\frac{9}{27} = \frac{9 \div 9}{27 \div 9}$

$\mathbf{\frac{1}{3}}$

Monday, Sept. 9th, 2013

7th

Simplify

$$\frac{10000}{25000}$$

Monday, Sept. 9th, 2013

7th

Simplify

$$\frac{10000}{25000}$$

Answer:

$$\frac{10000}{25000} = \frac{10000 \div 1000}{25000 \div 1000}$$

$$\frac{10}{25} = \frac{10 \div 5}{25 \div 5} = \frac{\mathbf{2}}{\mathbf{5}}$$

Tuesday, Sept. 10th, 2013 1st

Simplify:

$$24 - \sqrt{81} \div 3$$

Tuesday, Sept. 10th, 2013 1st

Simplify:

$$24 - \sqrt{81} \div 3$$

Answer: $24 - \sqrt{81} \div 3$

$24 - 9 \div 3$

$24 - 3 = \mathbf{21}$

Tuesday, Sept. 10th, 2013 2^{nd}

Emily bought $2\frac{1}{2}$ yards of yellow ribbon and $3\frac{1}{3}$ yards of blue ribbon. How many yards of ribbon did Emily buy?

Tuesday, Sept. 10th, 2013 2^{nd}

Emily bought $2\frac{1}{2}$ yards of yellow ribbon and $3\frac{1}{3}$ yards of blue ribbon. How many yards of ribbon did Emily buy?

Answer: $2\frac{1}{2} + 3\frac{1}{3} =$

$$(2 + 3) + \left(\frac{1}{2} + \frac{1}{3}\right)$$

$$5 + \left(\frac{3}{6} + \frac{2}{6}\right) = \mathbf{5\frac{5}{6}\ yards}$$

Tuesday, Sept. 10th, 2013 3rd

Jan has 9 yards of material to make baby blankets. Each blanket requires 3/4 yd of material. How many blankets can be made?

Tuesday, Sept. 10th, 2013 3rd

Jan has 9 yards of material to make baby blankets. Each blanket requires 3/4 yd of material. How many blankets can be made?

Answer: $9 \div \frac{3}{4}$

$$9 \times \frac{4}{3} = \frac{9 \times 4}{3} = \frac{36}{3}$$

12 blankets

Tuesday, Sept. 10th, 2013

4^{th}

Simplify:

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

Tuesday, Sept. 10th, 2013

4^{th}

Simplify:

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

Answer: $2\frac{1}{5}+\frac{2}{15}\cdot\frac{3}{2}$

$$2\frac{1}{5}+\frac{6}{30}=2\frac{1}{5}+\frac{1}{5}$$

$$\mathbf{2\frac{2}{5}}$$

Tuesday, Sept. 10th, 2013

5th

Simplify:

$$2(3) - (1 + 3) + 2^3$$

Tuesday, Sept. 10th, 2013

5th

Simplify:

$$2(3) - (1 + 3) + 2^3$$

Answer: $2(3) - (1 + 3) + 2^3$

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

$$2(3) - 4 + 8$$

$$6 - 4 + 8 = 2 + 8 = \mathbf{10}$$

Tuesday, Sept. 10th, 2013

6^{th}

If x = 4, y = 3, and z = 1,

then $y(\sqrt{x} + z) =$

Tuesday, Sept. 10th, 2013 6^{th}

If x = 4, y = 3, and z = 1,

then $y(\sqrt{x}+z) =$

Answer: $y(\sqrt{x}+z)$

$3(\sqrt{4}+1)$

$3(2+1)$

$3(3) = \mathbf{9}$

Tuesday, Sept. 10th, 2013

7th

Order from **least to greatest**:

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

Tuesday, Sept. 10th, 2013

7th

Order from **least to greatest**:

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

Answer: $\mathbf{\frac{2}{3}, \frac{3}{4}, \frac{3}{2}}$

Wednesday, Sept. 11th, 2013 1st

Simplify

$$\frac{2.5}{5}$$

Wednesday, Sept. 11th, 2013 1st

Simplify:

$$\frac{2.5}{5}$$

Answer: $\frac{2.5}{5} = \frac{2.5 \div 2.5}{5 \div 2.5}$

$$\frac{1}{2}$$

Wednesday, Sept. 11th, 2013 **2nd**

A turkey farmer has 989.72 pounds of turkey for sale at the beginning of November. At the end of the month, he has 27.9 pounds left. How many pounds did he sell in November?

Wednesday, Sept. 11th, 2013 **2nd**

A turkey farmer has 989.72 pounds of turkey for sale at the beginning of November. At the end of the month, he has 27.9 pounds left. How many pounds did he sell in November?

Answer:

$$Beginning\ Amount - Sold = Leftover$$

$$989.72 - x = 27.9$$

$$989.72 - x + x = 27.9 + x$$

$$989.72 - 27.9 = x$$

961.82 pounds sold

Wednesday, Sept. 11th, 2013 3rd

A recipe for cake requires 4/5 cup of butter. A low-fat version of this recipe replaces half of the butter with an equal amount of applesauce. How much applesauce is needed to make the low-fat recipe?

Wednesday, Sept. 11th, 2013 3rd

A recipe for cake requires 4/5 cup of butter. A low-fat version of this recipe replaces half of the butter with an equal amount of applesauce. How much applesauce is needed to make the low-fat recipe?

Answer: $\frac{1}{2}\text{ of}\frac{4}{5} = \frac{1}{2} \times \frac{4}{5}$

$\mathbf{\frac{4}{5}}$

Wednesday, Sept. 11th, 2013 4th

Solve for *y*:

$$3y = -27$$

Wednesday, Sept. 11th, 2013 4th

Solve for y:

$$3y = -27$$

Answer: $3y = -27$

$3y \div 3 = -27 \div 3$

$y = -9$

Wednesday, Sept. 11th, 2013 5th

Order these numbers from **least to greatest**:

$$\frac{1}{3}, -2, 1.4, 0.65, -1\frac{1}{4}$$

Wednesday, Sept. 11th, 2013 5th

Order these numbers from **least to greatest**:

$$\frac{1}{3}, -2, 1.4, 0.65, -1\frac{1}{4}$$

Answer: $\mathbf{-2, -1\frac{1}{4}, \frac{1}{3}, 0.65, 1.4}$

Wednesday, Sept. 11th, 2013 6th

Simplify:

$$\frac{3^2+5}{2}$$

Wednesday, Sept. 11th, 2013 6th

Simplify:

$$\frac{3^2+5}{2}$$

Answer:

$$\frac{3^2+5}{2}$$

$$\frac{9+5}{2} = \frac{14}{2} = 7$$

Wednesday, Sept. 11th, 2013 7th

The number $\sqrt{24}$ lies between which two whole numbers?

Wednesday, Sept. 11th, 2013 7th

The number $\sqrt{24}$ lies between which two whole numbers?

Answer: $\sqrt{16} < \sqrt{24} < \sqrt{25}$

$$\mathbf{4} < \sqrt{24} < \mathbf{5}$$

Thursday, Sept. 12th, 2013 1st

Write $\frac{2}{3}$ as a decimal.

Thursday, Sept. 12th, 2013 1st

Write $\frac{2}{3}$ as a decimal.

Answer: $2 \div 3$

$= \mathbf{0.\overline{6}}$

Thursday, Sept. 12th, 2013 2nd

If I walk for $\frac{1}{4}$ of an hour, run for $\frac{1}{3}$ of an hour, and walk for another $\frac{1}{6}$ of an hour, how much total time did I spend exercising?

Thursday, Sept. 12th, 2013 2nd

If I walk for $\frac{1}{4}$ of an hour, run for $\frac{1}{3}$ of an hour, and walk for another $\frac{1}{6}$ of an hour, how much total time did I spend exercising?

Answer: $\frac{1}{4}+\frac{1}{3}+\frac{1}{6}=$

$$\frac{3}{12}+\frac{4}{12}+\frac{2}{12}=\frac{9}{12}$$

$$\frac{9\div3}{12\div3}=\frac{3}{4}\ \text{hr}$$

Thursday, Sept. 12th, 2013 3rd

A radio station has to have 36 minutes for commercials. How many 3/4 minute commercials can fit in 36 minutes?

Thursday, Sept. 12th, 2013 3rd

A radio station has to have 36 minutes for commercials. How many 3/4 minute commercials can fit in 36 minutes?

Answer:

Total time ÷ length of one commercial = number of commercials

$$36 \div \frac{3}{4} = 36 \times \frac{4}{3}$$

$$\frac{36\times4}{3} = \frac{144}{3} = \textbf{48 commercials}$$

Thursday, Sept. 12th, 2013 4th

Write 1.23 as a percentage.

Thursday, Sept. 12th, 2013 4th

Write 1.23 as a percentage.

Answer: **123%**

Thursday, Sept. 12th, 2013 5th

Compare 180% ___ 2

Thursday, Sept. 12th, 2013 5th

Compare 180% ___ 2

Answer: 180% = 1.80, so

180% < 2

Thursday, Sept. 12th, 2013 6th

Simplify:

$$(2 + -3) + (14 + -5\ )$$

Thursday, Sept. 12th, 2013 6th

Simplify:

$$(2 + -3) + (14 + -5\ )$$

Answer: $(2 + -3) + (14 + -5\ )$

$$-1 + 9$$

8

Thursday, Sept. 12th, 2013 7th

Simplify:

$$-12 - 24 \div 3 \cdot 2 + 7$$

Thursday, Sept. 12th, 2013 7th

Simplify:

$$-12 - 24 \div 3 \cdot 2 + 7$$

Answer: $-12 - 24 \div 3 \cdot 2 + 7$

$-12 - 8 \cdot 2 + 7$

$-12 - 16 + 7$

$-28 + 7$

$\mathbf{-21}$

Friday, Sept. 13th, 2013 **1st**

If a = 3 and b = 4, then $a^2 + b =$

Friday, Sept. 13th, 2013 1st

If a = 3 and b = 4, then $a^2 + b =$

Answer: $a^2 + b =$

$3^2 + 4 = 9 + 4$

13

Friday, Sept. 13th, 2013 2nd

Susana bought 12.5 pounds of nails for $0.42 per pound. What was the total cost of the nails?

Friday, Sept. 13th, 2013 2nd

Susana bought 12.5 pounds of nails for $0.42 per pound. What was the total cost of the nails?

Answer: $12.5 \text{ pounds} \times \$0.42 \text{ per pound}$

$5.25

Friday, Sept. 13th, 2013 3rd

A cookie factory uses 1/4 of a barrel of oatmeal in each batch of cookies. The factory used 6 1/2 barrels of oatmeal yesterday. How many batches of cookies did the factory make?

Friday, Sept. 13th, 2013 3rd

A cookie factory uses 1/4 of a barrel of oatmeal in each batch of cookies. The factory used 6 1/2 barrels of oatmeal yesterday. How many batches of cookies did the factory make?

Answer: Total ÷ Amount per batch = # of batches

$$6\frac{1}{2} \div \frac{1}{4} = \frac{13}{2} \cdot \frac{4}{1}$$

$$\frac{52}{2} = \textbf{26 batches}$$

Friday, Sept. 13th, 2013 4th

Compare 6 ____ $\sqrt{35}$

Friday, Sept. 13th, 2013 4th

Compare 6 ____ $\sqrt{35}$

Answer: 6 = $\sqrt{36}$, so

6 > $\sqrt{35}$

Friday, Sept. 13th, 2013 5th

Simplify $3x - 2x + 4$

Friday, Sept. 13th, 2013 **5th**

Simplify $3x - 2x + 4$

Answer: $3x - 2x + 4$

$(3 - 2)x + 4$

$\boldsymbol{x + 4}$

Friday, Sept. 13th, 2013 6th

Simplify:

$$28 + 0 \div 4 - 10 \cdot 2$$

Friday, Sept. 13th, 2013 6th

Simplify:

$$28 + 0 \div 4 - 10 \cdot 2$$

Answer: $28 + 0 \div 4 - 10 \cdot 2$

$$28 + 0 - 20$$

8

Friday, Sept. 13th, 2013 7th

Simplify:

$$34 - 5(24 - 18)$$

Friday, Sept. 13th, 2013 7th

Simplify:

$$34 - 5(24 - 18)$$

Answer: $34 - 5(24 - 18)$

$$34 - 5(6)$$

$$34 - 30 = \mathbf{4}$$