

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

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

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?

Answer: $20 - 15 - 3 + 7$

$5 - 3 + 7$

$2 + 7 = 9$ yards gained

Monday, Sept. 9th, 2013

3rd

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

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

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

Monday, Sept. 9th, 2013

4th

Simplify:

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

Monday, Sept. 9th, 2013

4th

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

5th

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

Monday, Sept. 9th, 2013

5th

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

Answer: $\frac{1}{12} = 1 \div 12$
 $= \mathbf{0.08\bar{3}}$

Monday, Sept. 9th, 2013

6th

Simplify $\frac{9}{27}$

Monday, Sept. 9th, 2013

6th

Simplify $\frac{9}{27}$

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

$\frac{1}{3}$

Monday, Sept. 9th, 2013

7th

Simplify

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

Monday, Sept. 9th, 2013

7th

Simplify

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

Answer:

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

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

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

2nd

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

2nd

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

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

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

Tuesday, Sept. 10th, 2013

3rd

Jan has 9 yards of material to make baby blankets. Each blanket requires $\frac{3}{4}$ 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 $\frac{3}{4}$ 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

4th

Simplify:

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

Tuesday, Sept. 10th, 2013

4th

Simplify:

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

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

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

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

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

6th

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

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

Tuesday, Sept. 10th, 2013

6th

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

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

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

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

$3(2 + 1)$

$3(3) = 9$

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

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

$\frac{4}{5}$

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

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

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

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: $2 \div 3$
 $= 0.\overline{6}$

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:
$$\frac{1}{4} + \frac{1}{3} + \frac{1}{6} =$$
$$\frac{3}{12} + \frac{4}{12} + \frac{2}{12} = \frac{9}{12}$$
$$\frac{9 \div 3}{12 \div 3} = \frac{3}{4} \text{ hr}$$

Thursday, Sept. 12th, 2013

3rd

A radio station has to have 36 minutes for commercials. How many $\frac{3}{4}$ minute commercials can fit in 36 minutes?

Thursday, Sept. 12th, 2013

3rd

A radio station has to have 36 minutes for commercials. How many $\frac{3}{4}$ minute commercials can fit in 36 minutes?

Answer:

Total time \div length of one commercial = number of commercials

$$36 \div \frac{3}{4} = 36 \times \frac{4}{3}$$
$$\frac{36 \times 4}{3} = \frac{144}{3} = \mathbf{48 \text{ commercials}}$$

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 pounds \times \$0.42 per pound
\$5.25

Friday, Sept. 13th, 2013 **3rd**

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

Friday, Sept. 13th, 2013 3rd

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

Answer: Total \div Amount per batch = # of batches

$$6\frac{1}{2} \div \frac{1}{4} = \frac{13}{2} \cdot \frac{4}{1}$$
$$\frac{52}{2} = \mathbf{26 \text{ batches}}$$

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: $3x - 2x + 4$

$(3 - 2)x + 4$

$x + 4$

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: $34 - 5(24 - 18)$

$$34 - 5(6)$$

$$34 - 30 = 4$$