

Daily Math

Week 6 (2013-2014)

Mon. September 23, 2012

Tues. September 24, 2012

Wed. September 25, 2012

Thurs. September 26, 2012

Monday, Sept. 23rd, 2013

1st

What two whole numbers does $\sqrt{19}$ lie between on the real number line?

Monday, Sept. 23rd, 2013

1st

What two whole numbers does $\sqrt{19}$ lie between on the real number line?

Answer: $\sqrt{16} < \sqrt{19} < \sqrt{25}$

so, **4** $<$ $\sqrt{19}$ $<$ **5**

Monday, Sept. 23rd, 2013

2nd

Simplify:

$$\frac{(-3)^2 + 5}{2}$$

Monday, Sept. 23rd, 2013

2nd

Simplify:

$$\frac{(-3)^2 + 5}{2}$$

Answer:

$$\frac{(-3)^2 + 5}{2}$$

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

Monday, Sept. 23rd, 2013

3rd

Simplify:

$$3a + 5 - 2a$$

Monday, Sept. 23rd, 2013

3rd

Simplify:

$$3a + 5 - 2a$$

Answer: $3a + 5 - 2a$

$$3a - 2a + 5$$

$$**a + 5**$$

Monday, Sept. 23rd, 2013

4th

Simplify:

$$-3(4) - 4$$

Monday, Sept. 23rd, 2013

4th

Simplify:

$$-3(4) - 4$$

Answer:

$$-3(4) - 4$$

$$-12 - 4$$

-16

Monday, Sept. 23rd, 2013

5th

Simplify:

$$-3^2$$

Monday, Sept. 23rd, 2013

5th

Simplify:

$$-3^2$$

Answer: $-3^2 = -(3^2)$

$$-9$$

Monday, Sept. 23rd, 2013

6th

Write 87% as a decimal and a fraction.

Monday, Sept. 23rd, 2013

6th

Write 87% as a decimal and a fraction.

Answer: 87% = **0.87**

$$87\% = \frac{87}{100}$$

Monday, Sept. 23rd, 2013

7th

Simplify by combining like terms:

$$2y - y + x + 1$$

Monday, Sept. 23rd, 2013

7th

Simplify by combining like terms:

$$2y - y + x + 1$$

Answer: $2y - y + x + 1$

$$y + x + 1$$

Tuesday, Sept. 24th, 2013

1st

Simplify:

$$3x - 7x + 3$$

Tuesday, Sept. 24th, 2013

1st

Simplify:

$$3x - 7x + 3$$

Answer:

$$3x - 7x + 3$$

$$**-4x + 3**$$

Tuesday, Sept. 24th, 2013

2nd

Simplify:

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

Tuesday, Sept. 24th, 2013

2nd

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. 24th, 2013

3rd

$$4(x + 2) =$$

Tuesday, Sept. 24th, 2013

3rd

$$4(x + 2) =$$

Answer: $4(x + 2) =$

$$4x + 8$$

Tuesday, Sept. 24th, 2013

4th

Simplify:

$$2 - 5^2$$

Tuesday, Sept. 24th, 2013

4th

Simplify:

$$2 - 5^2$$

Answer: $2 - 5^2$

$$2 - 25$$

$$\mathbf{-23}$$

Tuesday, Sept. 24th, 2013

5th

Simplify:

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

Tuesday, Sept. 24th, 2013

5th

Simplify:

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

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

$$24 - 9 \div 3$$

$$24 - 3$$

$$\mathbf{21}$$

Tuesday, Sept. 24th, 2013

6th

Compare:

$$180\% \text{ — } \frac{9}{5}$$

Tuesday, Sept. 24th, 2013

6th

Compare:

$$180\% \text{ — } \frac{9}{5}$$

Answer: $180\% = 1.80$

$$\frac{9}{5} = 1.8$$

$$180\% = \frac{9}{5}$$

Tuesday, Sept. 24th, 2013

7th

Simplify:

$$a^2 + 3a + 2a^2$$

Tuesday, Sept. 24th, 2013

7th

Simplify:

$$a^2 + 3a + 2a^2$$

Answer:

$$a^2 + 3a + 2a^2$$
$$a^2 + 2a^2 + 3a$$
$$**3a^2 + 3a**$$

Wednesday, Sept. 25th, 2013

1st

If $a = -3$ and $b = 2$,

then $a^2 - 3b =$

Wednesday, Sept. 25th, 2013

1st

If $a = -3$ and $b = 2$,

then $a^2 - 3b =$

Answer: $a^2 - 3b$

$$(-3)^2 - 3(2)$$

$$9 - 6 = 3$$

Wednesday, Sept. 25th, 2013 **2nd**

Simplify using the distributive property:

$$-2(x + 1)$$

Wednesday, Sept. 25th, 2013

2nd

Simplify using the distributive property:

$$-2(x + 1)$$

Answer: $-2(x + 1)$
 $-2x - 2$

Wednesday, Sept. 25th, 2013 **3rd**

Simplify:

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

Wednesday, Sept. 25th, 2013

3rd

Simplify:

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

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

$$-12 - 8 \cdot 2 + 7$$

$$-12 - 16 + 7$$

$$-28 + 7$$

$$-21$$

Wednesday, Sept. 25th, 2013

4th

Simplify:

$$3x + 8 - 4x + 5$$

Wednesday, Sept. 25th, 2013

4th

Simplify:

$$3x + 8 - 4x + 5$$

Answer:

$$3x + 8 - 4x + 5$$

$$3x - 4x + 8 + 5$$

$$-x + 13$$

Wednesday, Sept. 25th, 2013

5th

Simplify:

$$(7x - 12) - (3x - 2)$$

Wednesday, Sept. 25th, 2013

5th

Simplify:

$$(7x - 12) - (3x - 2)$$

Answer: $(7x - 12) - (3x - 2)$

$$7x - 12 - 3x + 2$$

$$7x - 3x - 12 + 2$$

$$4x - 10$$

Wednesday, Sept. 25th, 2013 6th

Find the next two numbers in the following pattern:

2, -4, -10, _____, _____

Wednesday, Sept. 25th, 2013 6th

Find the next two numbers in the following pattern:

2, -4, -10, _____, _____

Answer: 2, -4, -10, **-16**, **-22**

Wednesday, Sept. 25th, 2013

7th

Simplify:

$$3(x - 2)$$

Wednesday, Sept. 25th, 2013

7th

Simplify:

$$3(x - 2)$$

Answer:

$$3(x - 2)$$

$$**3x - 6**$$

Thursday, Sept. 26th, 2013

1st

Write $\frac{1}{5}$ as a decimal.

Thursday, Sept. 26th, 2013

1st

Write $\frac{1}{5}$ as a decimal.

Answer: $\frac{1}{5} = 1 \div 5$
0.2

Thursday, Sept. 26th, 2013

2nd

Simplify:

$$(2x)^2$$

Thursday, Sept. 26th, 2013

2nd

Simplify:

$$(2x)^2$$

Answer: $(2x)^2$

$$2^2 x^2$$

$$4x^2$$

Thursday, Sept. 26th, 2013

3rd

Simplify:

$$-6x - (-5x) =$$

Thursday, Sept. 26th, 2013

3rd

Simplify:

$$-6x - (-5x) =$$

Answer:

$$-6x - (-5x)$$

$$-6x + 5x$$

$$-x$$

Thursday, Sept. 26th, 2013

4th

Solve for x :

$$\frac{2}{7} = \frac{x}{21}$$

Thursday, Sept. 26th, 2013

4th

Solve for x :

$$\frac{2}{7} = \frac{x}{21}$$

Answer:

$$\begin{aligned}\frac{2}{7} &= \frac{x}{21} \\ (2)(21) &= 7x \\ 42 &= 7x \\ 42 \div 7 &= 7x \div 7 \\ \mathbf{6} &= \mathbf{x}\end{aligned}$$

Thursday, Sept. 26th, 2013

5th

Solve for x :

$$3x + 5 = 17$$

Thursday, Sept. 26th, 2013

5th

Solve for x :

$$3x + 5 = 17$$

Answer: $3x + 5 = 17$

$$3x + 5 - 5 = 17 - 5$$

$$3x = 12$$

$$3x \div 3 = 12 \div 3$$

$$x = 4$$

Thursday, Sept. 26th, 2013

6th

Solve for x :

$$5x - 4 = 8 - x$$

Thursday, Sept. 26th, 2013

6th

Solve for x :

$$5x - 4 = 8 - x$$

Answer:

$$5x - 4 = 8 - x$$

$$5x + x - 4 = 8 - x + x$$

$$6x - 4 = 8$$

$$6x - 4 + 4 = 8 + 4$$

$$6x = 12$$

$$6x \div 6 = 12 \div 6$$

$$x = 2$$

Thursday, Sept. 26th, 2013

7th

Solve for x :

$$\frac{3}{x} = \frac{24}{40}$$

Thursday, Sept. 26th, 2013

7th

Solve for x :

$$\frac{3}{x} = \frac{24}{40}$$

Answer: $\frac{3}{x} = \frac{24}{40}$

$$24x = (3)(40)$$

$$24x = 120$$

$$24x \div 24 = 120 \div 24$$

$$x = 5$$