

HCS Math Spiral 2016-17

Learning Period 4

Answer Key

February 1 – March 31

2/1

- 1.) If $k = 3$, what is the value of $7k - 2$? **19**
- 2.) If $n = 31$, what is the value of $6 - n$? **-25**
- 3.) If $n = 4$, what is the value of $6 \times n - 3$? **21**

2/2

- 1.) If $z = 3$, what is the value of $5 \times (6 - z)$? **15**
- 2.) If $s = 4$, what is the value of $s(9 - 4)$? **20**
- 3.) If $x = -2$, what is the value of $x - 5$? **-7**

2/3 Convert the mixed number into an improper fraction.

- 1.) $3\frac{1}{2} = \frac{7}{2}$
- 2.) $2\frac{1}{4} = \frac{9}{4}$
- 3.) $1\frac{2}{5} = \frac{7}{5}$

2/6 Convert the improper fraction into a mixed number.

- 1.) $\frac{11}{3} = 3\frac{2}{3}$
- 2.) $\frac{9}{5} = 1\frac{4}{5}$
- 3.) $\frac{14}{7} = 2$

2/7 Solve.

- 1.) $-3 + m$, when $m = -4$ **-7**
- 2.) $2.67 + p$, when $p = -1.2$ **1.47**
- 3.) $m + 12.2$, when $m = -10.5$ **1.7**

2/8 Solve.

- 1.) $2\frac{1}{3} + 4\frac{1}{2} = 6\frac{5}{6}$
- 2.) $1\frac{1}{3} + \frac{2}{3} = 2$
- 3.) $2\frac{2}{5} + 1\frac{1}{10} = 3\frac{1}{2}$

2/9

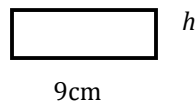
1.) Sally caught twice as many fish as her dad. If her dad caught f fish, write an expression to show how many fish sally caught? **$2f$**

2.) Ann has 54 crayons. This number is 18 more crayons than Bill has. Write an equation that can be used to find b , the number of crayons that Bill has. **$b + 18 = 54$**

2/10

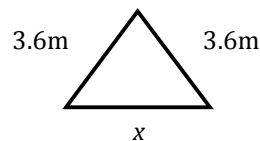
1.) What is the value of h if the area is 27cm^2 ?

$h = 3\text{cm}$



2.) Find the perimeter of the triangle if $x = 4.91\text{m}$.

$p = 12.11\text{m}$



2/13

- 1.) Evaluate $y \times y$ when $y = 10$. **100**
 2.) Find the value of x if $x + x = 28$ **$x = 14$**
 3.) Find the value of m if $3m = 39$ **$m = 13$**

2/14

- 1.) Find the value of s if $s + 5 = -10$. **$s = -15$**
 2.) Find the value of r if $2 + r = 1$. **$r = -1$**
 3.) Find the value of m if $6m = 6$. **$m = 1$**

2/15 Solve.

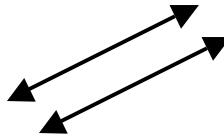
1.) $\frac{1}{2} + m = \frac{3}{4}$
 $m = \frac{1}{4}$

2.) $6x + 1 = 13$
 $x = 2$

3.) $-3 + m = 15$
 $m = 18$

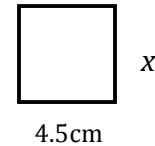
2/16

- 1.) Sketch a pair of parallel lines.



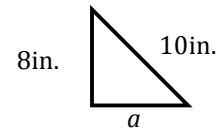
- 2.) Find the missing measurement, x , if the perimeter = 28.2 cm.

$x = 9.6 \text{ cm}$



- 3.) Find the missing measurement, a , if the perimeter = 24 in.

$a = 6 \text{ in}$

**2/21** Solve each equation for the variable.

1.) $m - 2 = -4$, **$m = -2$**

2.) $n \div 5 = 9$, **$n = 45$**

3.) $6y = 6$, **$y = 1$**

2/22 Solve.

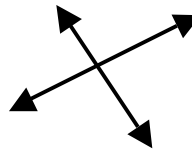
1.) $-41 - (-3) = -38$

2.) $5 + (-20) = -15$

3.) $-13 + 13 = 0$

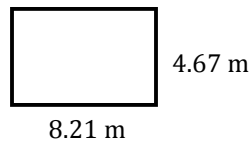
2/23

- 1.) Draw a pair of perpendicular lines.



- 2.) Find the area of the rectangle.

$a = 38.3407 \text{ m}^2$



3.) Solve $\frac{9}{10} - \frac{2}{7} = \frac{43}{70}$

2/24 Solve for the variable.

1.) $16x = 8$

$$x = \frac{1}{2}$$

2.) $\frac{m}{3} = 2$

$$m = 6$$

3.) $6x = 2$

$$x = \frac{1}{3}$$

2/27

1.) $-5 + m = -5$ $m = 0$

2.) Create your own algebraic equation and ask your parent to solve.

$$3x + 1 = 7 \text{ or something similar}$$

3.) What is the opposite of -8? 8

2/28

1.) $\frac{-2}{7} + \left(\frac{-3}{7}\right) = \frac{-5}{7}$

2.) When you add two negative numbers will you always get a negative answer?

Explain.

Yes (and explanation)

3.) $32 + (-31) = 1$

3/1

1.) Explain how you find the area of a rectangle. **Multiply base x height**

2.) Can you have a negative perimeter or area? Explain. **No, you can't measure around a figure with negative measurements.**

3/2 Solve.

1.) $-4.67 + (-3.1) = 7.77$

2.) $13.1 - 22 = -8.9$

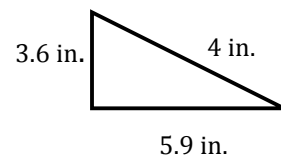
3.) If you add two positive numbers will you always get a positive answer? Explain.

Yes (and explanation)

3/3 Solve.

1.) $\frac{4}{9} + \frac{1}{3} = \frac{7}{9}$

2.) Find the perimeter. **= 13.5 in**



3.) $x + \frac{1}{4} = \frac{5}{12}$ $x = \frac{1}{6}$

3/6

1.) Draw an equilateral triangle. **all 3 sides the same length**

2.) Find the perimeter of this equilateral triangle.

$$P = 7.8 \text{ cm}$$



3/7 Solve.

1.) $m + (-6) = 10$

$m = 16$

2.) $3x = 21$

$x = 7$

3.) $-14 - (-4) = -10$

3/8 Solve.

1.) $15 \times \frac{1}{5} = 3$

2.) $2\frac{2}{3} \times 1\frac{1}{2} = 4$

3.) $\frac{n}{6} \times 18 = 12$ $n = 4$

3/9

1.) $0.321 - .029 = 0.292$

2.) $4.5 + 0.09 = 4.59$

3.) $8.01 - 3.13 = 4.88$

3/10

1.) $\frac{2}{3} \div n = 1$
 $n = \frac{2}{3}$

2.) $\frac{2}{3} \div t = \frac{1}{6}$
 $t = 4$

3.) $b \div \frac{1}{4} = \frac{8}{25}$
 $b = \frac{2}{25}$

3/13 Solve.

1.) $-3 - 5 = -8$ 2.) Whole numbers and their opposites are called Integers.

3.) $\frac{1}{2} + 3\frac{1}{4} = 3\frac{3}{4}$

3/14 Solve.

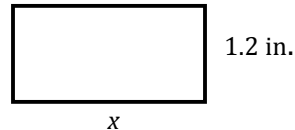
1.) $-3 + (-12) = -15$

2.) $-15 + 8 = -7$

3.) $4 - 19 = -15$

3/15

1.) Find the value of x if the $A=3.9 \text{ in}^2$
 $x = 3.25 \text{ in.}$



2.) Describe a real-life situation that can be represented by -12 .

The temperature is 12 degrees below zero. I owe my friend \$12.

3.) Compare $-7 < -4$

3/16 Solve.

1.) $5 + (-7) + (-17) = -19$

2.) $-31 + (-10) = -41$

3.) $0 + (-23) = -23$

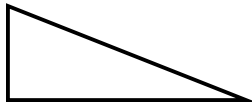
3/17

1.) The sum of two numbers is 20. Their product is 96. What are the two numbers?
12, 8

2.) The sum of three numbers is 22. Their product is 320. What are the three numbers?
4, 8, 10

3/20

1.) What kind of triangle is ABC?
Equilateral, Isosceles or *Scalene*?



2.) The perimeter of a sandbox is 32ft. The width is 6ft., what is the length?

$l = 10\text{ft.}$

3/21 Solve.

1.) $-6 \times 3 = -1$

2.) $-3 \times (-3) \times (-1) = -9$

3.) $8 \times (-8) = -64$

3/22

1.) $b - 4.5 = 14$

$b = 18.5$

2.) $4\frac{1}{2} - 2\frac{5}{6}$
 $= 1\frac{2}{3}$

3.) $4\frac{1}{2} \times \frac{1}{4}$
 $= 1\frac{1}{8}$

3/23 Solve for the variable.

1.) $t + (-4) = -4$
 $t = 0$

2.) $p - 3 = -5$
 $p = -2$

3.) $38 - x = 0$
 $x = 38$

3/24 Solve for the variable.

1.) $\frac{a}{6} = 2.5$
 $a = 15$

2.) $4y = 48$
 $y = 12$

3.) $4z + 5 = 9$
 $z = 1$

3/27 Find the product.

1.) $2(-10) = -20$

2.) $(-4)(-7) = 28$

3.) $(9)(3) = 27$

3/28 Solve.

1.) $156.29 + 26.213$
182.503

2.) $49.2 - 26.8$
22.4

3.) 12×79
948

3/29

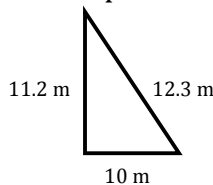
1.) $286 \div 22$
13

2.) $\frac{1}{5} + \frac{3}{10} = \frac{5}{10} = \frac{1}{2}$

3.) $149.1 + 27$
176.1

3/30

1.) Find the perimeter: **33.5m**



2.) 6.291
 $- 4.320$
1.971

3.) Order from least to greatest:
2, -3, 5, 0, -9
-9, -3, 0, 2, 5

3/31 Find the sum.

1.) $1.6 + 0.89$
2.49

2.) $3.12 + 6.4$
9.52

3.) $\$317.26 + \110.99
\\$428.25