HCS Math Spiral 2020-21 KEY

Learning Period 3

December 1 – January 29

12/1 Find the product.

1.) $15 \times \frac{1}{5}$ **= 3** 2.) $15 \times \frac{2}{5}$ **= 6** 3.) $15 \times \frac{3}{5}$ **= 9**

12/2 Find the product.

1.) $2 \times \frac{1}{2}$ **= 1** 2.) $8 \times \frac{1}{2}$ **= 4** 3.) $22 \times \frac{1}{2}$ **= 11**

12/3 Find the product.

1.) $\frac{2}{3} \times \frac{3}{4}$ **=½** 2.) $\frac{2}{3} \times \frac{1}{4}$ **=** $\frac{1}{6}$ 3.) $5 \times \frac{1}{10}$ **=½**

12/4 Find the product.

1.) $\frac{1}{4} \times \frac{3}{4}$ **=** $\frac{3}{16}$ 2.) $\frac{2}{9}$ *of* $\frac{3}{8}$ **=** $\frac{1}{12}$ 3.) $\frac{3}{8}$ *of* $\frac{2}{3}$ **=** $\frac{1}{4}$

12/7

1.) Sam spends $\frac{2}{3}$ of an hour each day in his garden. When he is in his garden, he spends $\frac{1}{2}$ the time watering the plants. How much time does Sam spend watering the plants each day? **Sam spends $\frac{1}{3}$ of an hour everyday watering his plants; therefore he spends 20 minutes a day watering.**

2.) $\frac{3}{4} \times \frac{n}{2} = \frac{3}{8}$ **n = 1** 3.) $\frac{2}{3} \times \frac{n}{5} = \frac{8}{15}$ **n = 4**

12/8

1.) One fourth of Sue's roses are yellow. She gives one third of the yellow roses to Judy. What fraction of her roses does she give to Judy? **Sue gives Judy one twelfth of her roses.**

2.) Neil has used $\frac{2}{3}$ of the 51 pieces in his model kit. Victor has used $\frac{2}{3}$ of the 72 pieces in his kit. Who has used more pieces? **Victor has used more pieces.**

12/9 Solve.

1.) $\frac{4}{7} + \frac{1}{3} = \frac{19}{21}$ 2.) $\frac{3}{5} - \frac{1}{10} = \frac{1}{2}$ 3.) $\frac{3}{10}$ *of* $\frac{5}{9} = \frac{1}{6}$

12/10

1.) Find the reciprocal of $\frac{5}{6}$ **=** $\frac{6}{5}$ *or* $1\frac{1}{5}$ 2.) $\frac{4}{9} \div \frac{1}{3}$ **=** $\frac{4}{3}$ *or* $1\frac{1}{3}$ 3.) $\frac{1}{2} \div \frac{1}{2}$ **=1**

12/11

1.) Find the reciprocal of $\frac{13}{3}$ **=** $\frac{3}{13}$ 2.) $\frac{3}{4} \div \frac{3}{8}$ **=2**

3.) Does multiplication or division make this statement true? $\frac{3}{4} \square \frac{5}{12} = 1\frac{4}{5}$

Division

12/14

1.) Find the reciprocal of 5. **=** $\frac{1}{5}$ 2.) Find the reciprocal of $1\frac{1}{4}$ **=** $\frac{4}{5}$

3.) Find the quotient of $\frac{5}{6} \div \frac{1}{3}$ **=** $\frac{5}{2}$ *or* $2\frac{1}{2}$

12/15

1.) If you divide a fraction by a fraction will you always get a fraction as your answer? Explain. **No**

2.) Solve. $\frac{4}{9} \times \frac{1}{2} = \frac{2}{9}$ 3.) Solve. $\frac{7}{8} \div \frac{2}{8} = \frac{7}{2}$ *or* $3\frac{1}{2}$

12/16 Find the opposite of the following numbers.

1.) 20 **-20** 2.) -5 **5** 3.) $-\frac{1}{3}$ $\frac{1}{3}$

12/17 Compare each set of numbers with >, <, or =

1.) 2 **>** -4 2.) -6 **<** 6 3.) -3 **>** -5

12/18 Order each set of numbers from least to greatest.

1.) 2, -3, 0 **-3, 0, 2**

2.) -7, -1, 5 **-7, -1, 5**

3.) -2, 3, -4 **-4, -2, 3**

1/5 Solve.

1.) 2.67 x 4.9 **= 13.083** 2.) -4 + (-3) **= -7** 3.) -9 +2 **= -7**

1/6

1.) Solve. 5 + (-3) **= 2**

2.) Order from least to greatest: 3, 0, -5, 1, -1 **-5, -1, 0, 1, 3**

3.) Solve. -7 + (-3) **= -10**

1/7 Solve.

1.) 9 + (-9) **= 0** 2.) 0 + (-3) **= -3** 3.) 22 + (-20) **= 2**

1/8

1.) Will the sum of -6 + 5 be positive or negative, how do you know?
It will be negative because the absolute value of the negative 6 is higher than 5 so we keep the sign of the negative 6.

2.) -10 + (-2) **= -12**

3.) 5 + 4 **= 9**

1/11 Solve.

1.) $\frac{1}{2}+\frac{1}{8}=\frac{5}{8}$

2.) -5 - 2 **= -7**

3.) -5 + (-2) **= -7**

1/12 Solve.

1.) -6 – (-3) **= -3**

2.) -6 + 3 **= -3**

3.) 9 – (-3) **= 12**

1/13 Solve.

1.) $\frac{4}{9}\times\frac{3}{8}=\frac{1}{6}$

2.) 4 – 5 **= -1**

3.) -15 – 10 **= -25**

1/14 Solve.

1.) -8 – (-8) **= 0**

2.) $\frac{3}{8}\div\frac{1}{4}=\frac{3}{2}$ *or* $1\frac{1}{2}$

3.) Compare using <, > or =. (2 – 3) **<** (-1 + 1)

1/15 Solve.

1.) 3 – (-10) **= 13**

2.) -12 + 6 **= -6**

3.) -3 + (-2) **= -5**

1/19

1.) -1 + (-2) **= -3**

2.) Order from least to greatest. 5, -7, 9, -8
-8, -7, 5, 9

3.) Will the sum of -9 + 12 be positive or negative, how do you know?
It will be positive because 12 is large than the absolute value of -9 therefore we will keep the sign of the positive 12.

1/20

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

2.) Compare using <, >, or =. -20 **>** -21

3.) -4 – (-4) **= 0**

1/21 Solve.

1.) $12\times\frac{1}{2}$ **= 6**

2.) 12 x 0.5 **= 6**

3.) 12 x 50% **= 6**

1/22

1.) Write $\frac{11}{2}$ as a mixed number. $5\frac{1}{2}$

2.) Write $4\frac{3}{8}$ as an improper fraction. $\frac{35}{8}$

3.) 3 + (-8) **= -5**

1/25 Evaluate the algebraic expression.

1.) $t + 4$, when $t = 5$ **9**

2.) $n - 6$, when $n = 10.8$ **4.8**

3.) $b - 4.5$, when $b = 30$ **25.5**

1/26 Evaluate the algebraic expression.

1.) $\frac{a}{4}$ when $a = 24$ **6**

2.) $9 \times m$, when $m = 3$ **27**

3.) The area of a rectangle is $24 in.^2$, the length is $6 in.$, what is the height of the rectangle?
The height of the rectangle is 4 inches.

1/27 Find the value of the variable.

1.) $x + 9 = 14$, ***x* = 5**

2.) $5 \times y = 30$, ***y* = 6**

3.) $\frac{x}{6} = 6$, ***x* = 36**

1/28 Solve each equation for the variable.

1.) $e + 6 = 17$, ***e* = 11**

2.) $21 = g + 4$, ***g* = 17**

3.) $m - 15 = 3.6$, ***m* = 18.6**

1/29

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

2.) What is the inverse operation of multiplication? **Division**

3.) What is the inverse operation of addition? **Subtraction**