

# HCS Math Spiral 2016-17

## Learning Period 5

April 3 – May 19 (Spring Break: April 14 – 21)

### Answer Key

4/3

1.)  $5 \overline{)4,250}$

**850**

2.)  $3 \overline{)71}$

**23R2 or 23.67**

3.)  $4 \overline{)110}$

**27R2 or 27.5**

4/4

1.) 969.76

$$\begin{array}{r} 115.45 \\ + 58.37 \\ \hline \end{array}$$

**1,143.58**

2.) 623.1

$$\begin{array}{r} - 42.9 \\ \hline \end{array}$$

**580.2**

3.)  $2.3 \times \underline{\hspace{2cm}} = 2,300$

**1000**

4/5

Write each fraction in simplest form.

1.)  $\frac{21}{30} = \frac{7}{10}$

2.)  $\frac{18}{45} = \frac{2}{5}$

3.)  $\frac{4}{16} = \frac{1}{4}$

4/6

Find the LCD of the following sets of fractions.

1.)  $\frac{1}{2}$  &  $\frac{3}{5}$      **10**

2.)  $\frac{2}{7}$  &  $\frac{1}{3}$      **21**

3.)  $\frac{1}{8}$  &  $\frac{3}{16}$      **16**

4/7

Find the missing number.

1.)  $\frac{2}{3} = \frac{n}{9}$      **n = 6**

2.)  $\frac{10}{12} = \frac{5}{n}$      **n = 6**

3.)  $\frac{1}{5} = \frac{n}{20}$      **n = 4**

4/10

Order each list of numbers from least to greatest.

1.)  $\frac{1}{2}, \frac{1}{3}, \frac{3}{4}$

2.)  $\frac{1}{4}, \frac{1}{2}, \frac{1}{5}$

**ANSWERS:**  $\frac{1}{3}, \frac{1}{2}, \frac{3}{4}$

$\frac{1}{5}, \frac{1}{4}, \frac{1}{2}$

4/11

Solve.

1.)  $\frac{2}{3} + \frac{7}{12} = \frac{15}{12} = \frac{5}{4}$  or  $1\frac{1}{4}$

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

3.)  $\frac{5}{6} - \frac{1}{4} = \frac{7}{12}$

#### 4/12

Solve each equation for the variable.

1.)  $\frac{1}{2} + b = \frac{5}{6}$     $b = \frac{2}{6}$  or  $\frac{1}{3}$    2.)  $\frac{7}{8} - n = \frac{1}{8}$     $n = \frac{6}{8}$  or  $\frac{3}{4}$    3.)  $\frac{17}{20} - y = \frac{3}{4}$     $y = \frac{2}{20}$  or  $\frac{1}{10}$

#### 4/13

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  $\frac{2}{3} = \frac{1}{4}$

#### 4/24

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.**

#### 4/25

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**

#### 4/26

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.)  $5 + 4 = 9$

#### 4/27

Solve.

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

2.)  $4 - 5 = -1$

3.)  $-15 - 10 = -25$

#### 4/28

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

2.) Compare using  $<$ ,  $>$ , or  $=$ .

3.)  $-4 - (-4) = 0$

$-20 > -21$

#### 5/1

Find the value of the variable.

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

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

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

### 5/2

Evaluate the algebraic expression.

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

**6**

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

**27**

### 5/3

Solve.

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

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

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

### 5/4

1.) Evaluate  $y \times y$  when  $y = 10$ . **100**

2.) Find the value of  $x$  if  $x + x = 28$   **$x = 14$**

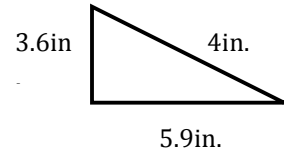
3.) Find the value of  $m$  if  $3m = 39$   **$m = 13$**

### 5/5

Solve.

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

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



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

### 5/8

Solve.

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

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

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

### 5/9

Solve for the variable.

1.)  $16x = 8$

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

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

**$m = 6$**

3.)  $6x = 2$

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

### 5/10

1.) Find the reciprocal of  $\frac{7}{9} = \frac{9}{7}$

2.)  $\frac{2}{3} \div \frac{5}{12} = \frac{8}{5} = 1\frac{3}{5}$

3.) Does multiplication or division make this statement true?

$\frac{3}{4} \square \frac{5}{12} = \frac{5}{16}$

**Multiplication**

### 5/11

Find the product.

1.)  $\frac{1}{5} \times \frac{3}{5} = \frac{3}{25}$

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

3.)  $\frac{3}{10}$  of  $\frac{5}{6} = \frac{1}{4}$

**5/12**

1.)  $7 \overline{)4,249}$  607r1 or

**607**

2.)  $4 \overline{)79}$

**19R3 or 19.75**

3.)  $6 \overline{)951}$

**158R3 or 158.5**

**5/15**

Find the missing number.

1.)  $\frac{1}{4} = \frac{n}{12}$   **$n = 3$**

2.)  $\frac{3}{7} = \frac{9}{n}$   **$n = 21$**

3.)  $\frac{3}{4} = \frac{n}{32}$   **$n = 24$**

**5/16**

Find the sum.

1.)  $23.7 + 0.99 = \mathbf{24.69}$

2.)  $9.6 + 23.41 = \mathbf{33.01}$

3.)  $\$702.26 + \$297.75 = \mathbf{\$1,000.01}$

**5/17**1.) Will the sum of  $11 + (-8)$  be positive or negative, how do you know? **It will be positive because the absolute value of the negative 8 is lower than 11 so we keep the sign of the positive 11.**

2.)  $-13 + 21 = \mathbf{8}$

3.)  $-3 + (-18) = \mathbf{-21}$

**5/18**

Write each fraction in simplest form.

1.)  $\frac{8}{52} = \frac{2}{13}$

2.)  $\frac{9}{42} = \frac{3}{14}$

3.)  $\frac{6}{33} = \frac{2}{11}$

**5/19**

Solve for the variable.

1.)  $10y = 2$

$y = \frac{1}{5}$

2.)  $\frac{x}{2} = 7$

**$x = 14$**

3.)  $35m = 5$

$m = \frac{1}{7}$