

DUVAL COUNTY PUBLIC SCHOOLS

Name Answer Key

Date M: 11/14/15

Solve using the RDW process.

1. A pair of jeans costs \$89. A jean jacket costs twice as much. What is the total cost of 1 jean jacket and 4 pairs of jeans?

Jeans = \$89

Jacket = 2 x \$89 = \$178

4 pairs of jeans = 4 x \$89 = \$356

80	9
4	320
	36
	\$356

$$\begin{array}{r} 320 \\ 36 \\ \hline 356 \end{array} \times 4 = 356 \checkmark$$

356
178
\$534

$$\begin{array}{r} 356 \\ + 178 \\ \hline 534 \end{array}$$

The total cost of 4 pairs of jeans and 1 Jean Jacket is \$534.

2. Sarah bought a shirt on sale for \$35. The original price of the shirt was 3 times that amount. Sarah also bought a pair of shoes on sale for \$28. The original price of the shoes was 5 times that amount.

(+) Together, how much money did the shirt and shoes cost before they went on sale?

Shirt = \$35 x 3 = \$105

Shoes = \$28 x 5 = \$140

\$245

30	5
3	90
	15
	105

$$\begin{array}{r} 90 \\ 15 \\ \hline 105 \end{array} \times 3 = 105 \checkmark$$

20	8
5	100
	40
	140

$$\begin{array}{r} 100 \\ 40 \\ \hline 140 \end{array} \times 5 = 140 \checkmark$$

Together, the shirt and the pair of shoes cost \$245 before they went on sale.



3. All 3,000 seats in a theater are being replaced. So far, 5 sections of 136 seats and a sixth section containing 348 seats have been replaced. How many more seats do they still need to replace?

Total seats: 3,000

$$\begin{array}{r} 5 \times 136 = 680 \\ + 348 \\ \hline \end{array}$$

100	30	6
5	500	150
		30

$$\begin{array}{r} 500 \\ 150 \\ 30 \\ \hline 680 \end{array}$$

$$\begin{array}{r} 136 \\ \times 5 \\ \hline 680 \end{array}$$

1,028 = seats already replaced

$$\begin{array}{r} 2,199 \\ - 1,028 \\ \hline \end{array}$$

1,972 = seats left

There are still 1,972 seats in the theater that need to be replaced.

4. Computer Depot sold 762 reams of paper. Paper Palace sold 3 times as much paper as Computer Depot and 143 reams more than Office Supply Central. How many reams of paper were sold by all three stores combined?

Computer Depot = 762

Paper Palace = $3 \times 762 = 2,286$

Office Supply Central = $2,286 - 143 = 2,143$

700	60	2
3	2,100	180
		6

$$\begin{array}{r} 2,100 \\ 180 \\ 6 \\ \hline 2,286 \end{array}$$

$$\begin{array}{r} 762 \\ \times 3 \\ \hline 2,286 \end{array}$$

$$\begin{array}{r} 2,286 \rightarrow \text{P.P.} \\ 2,143 \rightarrow \text{O.S.C.} \\ + 762 \rightarrow \text{C.D.} \\ \hline 5,191 = \text{total} \end{array}$$

$$\begin{array}{r} 2,286 \\ - 143 \\ \hline 2,143 \end{array}$$

$$\begin{array}{r} 2,143 \\ + 143 \\ \hline 2,286 \end{array}$$

The three stores sold a total of 5,191 reams of paper altogether.



Name _____

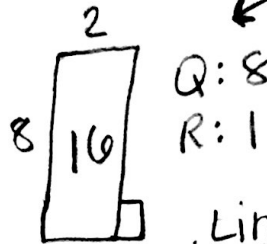
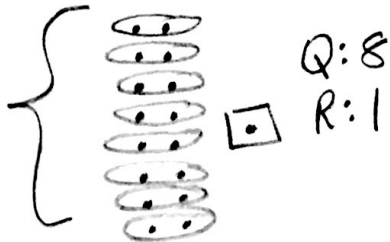
Date _____

Use the RDW process to solve the following problems.

1. Linda makes booklets using 2 sheets of paper. She has 17 sheets of paper. How many of these booklets can she make? Will she have any extra paper? How many sheets?

$$17 \div 2 = 8 \text{ r } 1$$

array



area model

D ✓
M ✓
S ✓
B ×
R ✓

$$\begin{array}{r} \times 8 \text{ r } 1 \\ 2 \overline{) 17} \\ \underline{-16} \\ \text{r } 1 \end{array}$$

standard algorithm

Linda can make 8 booklets and 1 piece of paper leftover.

2. Linda uses thread to sew the booklets together. She cuts 6 inches of thread for each booklet. How many booklets can she stitch with 50 inches of thread? Will she have any unused thread after stitching up the booklets? If so, how much?

$$50 \div 6$$

D ✓
M ✓
S ✓
B ×
R ✓

$$\begin{array}{r} \times 8 \text{ r } 2 \\ 6 \overline{) 50} \\ \underline{-48} \\ \text{r } 2 \end{array}$$

$$\begin{array}{r} 8 - \text{Quotient} \\ \times 6 - \text{divisor} \\ \underline{48} \\ + 2 - \text{remainder} \\ \hline 50 - \text{dividend} \end{array}$$

- 6 x 1 = 6
- 6 x 2 = 12
- 6 x 3 = 18
- 6 x 4 = 24
- 6 x 5 = 30
- 6 x 6 = 36
- 6 x 7 = 42
- 6 x 8 = 48

Linda can sew 8 books together and have 2 inches of thread left over.

3. Ms. Rochelle wants to put her 29 students into groups of 6. How many groups of 6 can she make? If she puts any remaining students in a smaller group, how many students will be in that group?

$$29 \div 6 =$$

D ✓
M ✓
S ✓
B ×
R ✓

$$\begin{array}{r} \times 4 \text{ r } 5 \\ 6 \overline{) 29} \\ \underline{-24} \\ \text{r } 5 \end{array}$$

Q: 4
R: 5

$$\begin{array}{r} 4 - Q \\ \times 6 - \text{divisor} \\ \underline{24} \\ + 5 - R \\ \hline 29 - \text{dividend} \end{array}$$

Ms. Rochelle can make

4 groups of 6 students. She will have 5 students remaining.

So Ms. Rochelle will have a total of 5 groups. 4 of the groups will have 6 students and 1 group with 5 students.



4. A trainer gives his horse, Caballo, 7 gallons of water every day from a 57-gallon container. How many days will Caballo receive his full portion of water from the container? On which number day will the trainer need to refill the container of water?

$$57 \div 7 = 8 \text{ r } 1$$

D ✓
M ✓
S ✓
B x
R ✓

$$\begin{array}{r} \times 8 \text{ r } 1 \\ 7 \overline{) 57} \\ \underline{-56} \\ \text{r } 1 \end{array}$$

Q: 8
R: 1

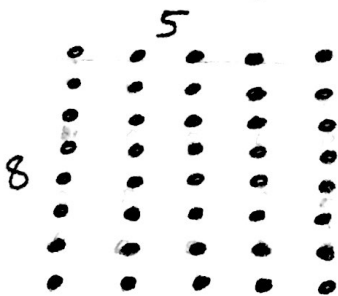
$$\begin{array}{r} \times 8 \\ \underline{+ 7} \\ 56 \\ \underline{+ 1} \\ 57 \end{array}$$

Caballo will be able to get 8 days of his full portion of water from the 57-gallon container. On the 9th day, the trainer will need to refill the container.

- 7 x 1 = 7 → Day 1
- 7 x 2 = 14 → Day 2
- 7 x 3 = 21 → Day 3
- 7 x 4 = 28 → Day 4
- 7 x 5 = 35 → Day 5
- 7 x 6 = 42 → Day 6
- 7 x 7 = 49 → Day 7
- 7 x 8 = 56 → Day 8

5. Meliza has 43 toy soldiers. She lines them up in rows of 5 to fight imaginary zombies. How many of these rows can she make? After making as many rows of 5 as she can, she puts the remaining soldiers in the last row. How many soldiers are in that row?

$$43 \div 5 = 8 \text{ r } 3$$



Meliza can make 8 rows of 5 soldiers in each row. The last row will have the 3 remaining soldiers in it.

array

6. Seventy-eight students are separated into groups of 8 for a field trip. How many groups are there? The remaining students form a smaller group of how many students?

$$78 \div 8 = 9 \text{ r } 6$$

There will be 9 groups of 8 students and 1 group of the remaining 6 students.

- 8 x 1 = 8
- 8 x 2 = 16
- 8 x 3 = 24
- 8 x 4 = 32
- 8 x 5 = 40
- 8 x 6 = 48
- 8 x 7 = 56
- 8 x 8 = 64
- 8 x 9 = 72

$$\begin{array}{r} \times 9 \text{ r } 6 \\ 8 \overline{) 78} \\ \underline{-72} \\ \text{r } 6 \end{array}$$

Q: 9
R: 6

$$\begin{array}{r} \times 9 \\ \underline{+ 8} \\ 72 \\ \underline{+ 6} \\ 78 \end{array}$$

D ✓
M ✓
S ✓
B x
R ✓