day
ber 2,
15

WARM-UP

Page 60

Simplify each expression.

1) 3(1.7)(8) =

2) z + y + y + z =

3) 1/3 (x - 8)

lnesday
ber 4, 2015

WARM-UP

Page 60

Simplify each expression.

1) $-2x^2 + 4x - 19 - 12 + 5x^2 - 5x =$

2) $-3(7x - 2y) + 18x =$

Lesson Essential Question:

How does backtracking help us solve an equation efficiently?

EXAMPLE: $x + 8 = 21$

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$x + 8 = 21$

2) Perform inverse (or opposite) opperation.

$x + 8 = 21$

$-8 = -8$

3) Box your final answer.

$x = 13$

EXAMPLE: $3x = 21$

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$3x = 21$

2) Perform inverse (or opposite) opperation.

$\frac{3x}{3} = \frac{21}{3}$

3) Box your final answer.

$x = 7$

WHAT DOES INVERSE MEAN?

EXAMPLE: $x - 12 = 37$

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$x - 12 = 37$

2) Perform inverse (or opposite) opperation.

3) Box your final answer.

EXAMPLE: $-8x = 64$

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$-8x = 64$

2) Perform inverse (or opposite) opperation.

3) Box your final answer.

1) $26 = 8 + v$

2) $v - 10 = -3$

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3) $15 + b = 23$

4) $\frac{x}{5} = 2$

5) $m + 4 = -12$

6) $-13m = -377$

7) $m - 9 = -13$

8) $-8 = p - 13$

9) $v - 15 = -27$

10) $418 = -22a$

1) DRAW your RIVER (a line to separate left-side from the right-side.)

2) Perform inverse (or opposite) operation.

3) Box your final answer.

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ber 5, 2015

WARM-UP

Solve for x.

1) $x + 5.6 = 9.8$

2) $x - 1.7 = 9$

3) $x + 2.25 = 7.85$

4) $-6x = 36$

5) $1.1x = 110$

6) $-0.9x = 8.1$

7) Write an expression for the perimeter of a rectangle, whose length is three times as long as the width.

riday
ber 6, 2015

WARM-UP

Solve for x.

1) x + 2.4 = 5.1

2) x - 3.5 = 12

3) x + 4.75 = 10.78

Lesson Essential Question:

How can we use backtracking to help us solve a two-step equation?

EXAMPLE: $3x + 8 = 29$

COMBINE ALL LIKE TERMS FIRST

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$3x + 8 = 29$

2) Perform inverse (or opposite) operation(s).

$3x + 8 = 29$

$-8 \quad = \quad -8$

3) Box your final answer.

$\frac{3x}{3} = \frac{21}{3}$

$x = 7$

EXAMPLE: $3x + x - 7 = 21$

COMBINE ALL LIKE TERMS FIRST

1) DRAW your RIVER (a line to separate left-side from the right-side.)

$4x - 7 = 21$

2) Perform inverse (or opposite) operation(s).

$4x - 7 = 21$

$+7 = +7$

3) Box your final answer.

$\frac{4x}{4} = \frac{28}{4}$

$x = 7$

DID MY ANSWER HAVE???

■ VARIABLE TERM ■ an EQUAL SIGN ■ CONSTANT

1. $3c + 6 = 18$

2. $3v + 9 = 15$

3. $3z + 3 = 27$

4. $3c + 2 = 2$

5. $3a - 5 = 7$

6. $2a + 8 = 16$

7. $3a + 2 = 17$

8. $2y - 10 = 8$

9. $3x - 1 = 14$

10. $2z + 3 = 23$

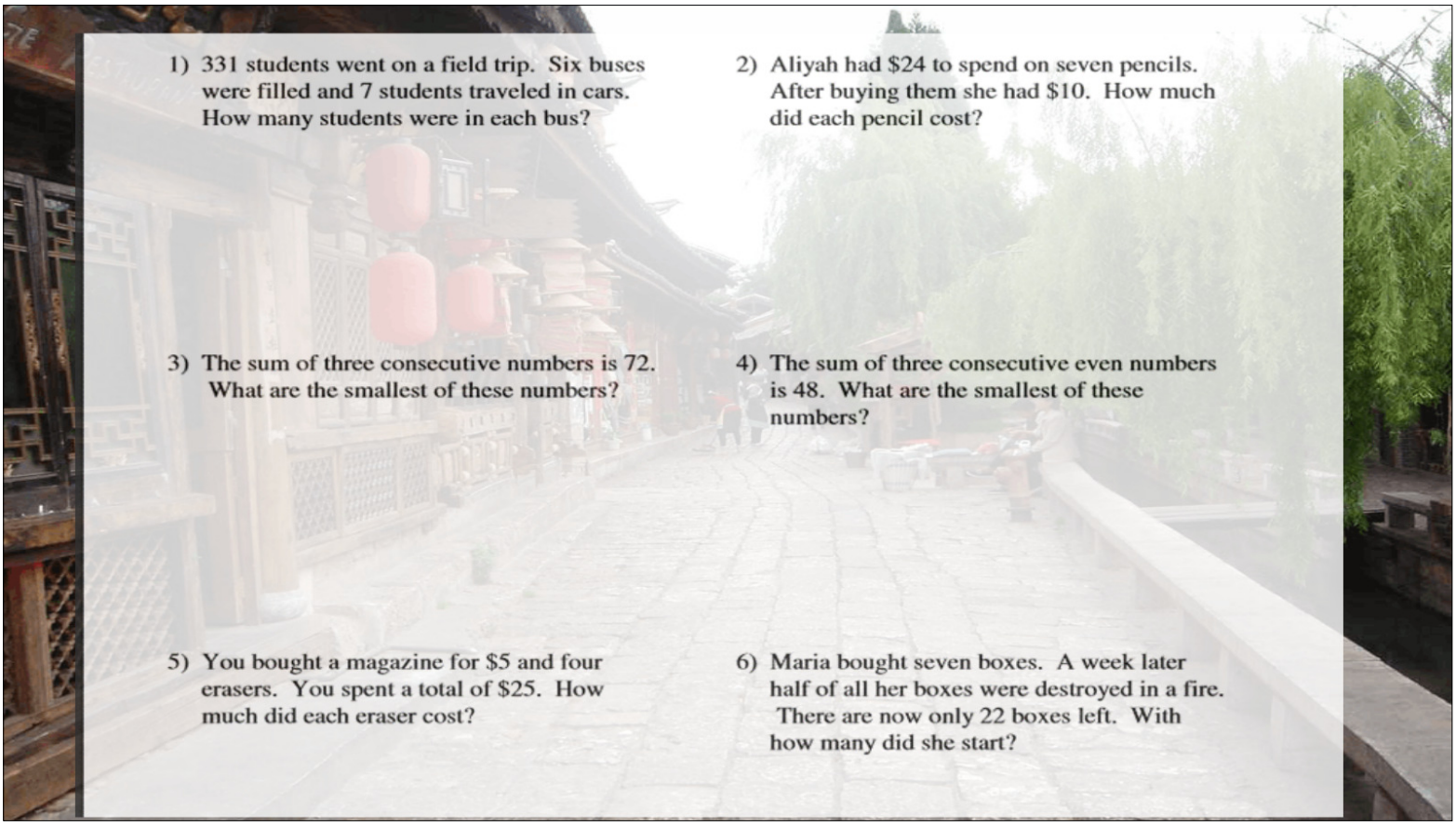
1

1

1

TRY IT ON YOUR OWN.

Once you are finished, SHARE YOUR IDEAS with your neighbor.



1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

2) Aliyah had $24 to spend on seven pencils. After buying them she had $10. How much did each pencil cost?

3) The sum of three consecutive numbers is 72. What are the smallest of these numbers?

4) The sum of three consecutive even numbers is 48. What are the smallest of these numbers?

5) You bought a magazine for $5 and four erasers. You spent a total of $25. How much did each eraser cost?

6) Maria bought seven boxes. A week later half of all her boxes were destroyed in a fire. There are now only 22 boxes left. With how many did she start?

WARM-UP

Solve

1) $4y + 5 = 49$

2) $8 - 7w = 57$

3) $2x - 5 - 8x = -41$

First, list the steps for solving the equations below. Then, SOLVE.

4) $2(g - 12) = 16$

-
-
-
-

5) $8(k + 9) = -16$

-
-
-
-

REMEMBER THESE GUYS???

Perimeter =

Area =

Perimeter =

Area =

Perimeter =

Area =

Your family is purchasing new carpet for your bedroom. After measuring your room, the carpenter tells you the length is 9 feet and your width is represented by (x + 4).

1) Write an expression that finds the area of your bedroom.

2) Suppose the area of your bedroom is 172 ft^2. What is the width of the bedroom?

3) What if you wanted to add border around your room. How much border would you need?

Your family is purchasing new carpet for your bedroom. After measuring your room, the carpenter tells you the length is 7 feet and your width is represented by (x + 5).

1) Write an expression that finds the area of your bedroom.

2) Suppose the area of your bedroom is 98 ft^2. What is the width of the bedroom?

3) What if you wanted to add border around your room. How much border would you need?