Unit: Linear Equations
Round Table – A

Name _____

Date _____Pd_____

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

A skier can choose between buying a season pass or paying to ski daily. A daily pass costs $47.50 per day and includes ski rentals. A season ski pass costs a one-time fee of $390 and a daily fee of $17.50 for ski rentals. How many days would the skier have to go skiing in order for both options to cost the same amount?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – A

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

19 less than a number is the same as the sum of half the number and six. What is the number?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – B

Name _____

Date _____Pd_____

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

On Thursday morning a bakery owner prepared by baking several pies and decorating cupcakes. She spent 90 minutes baking the pies and an average of 1.2 minutes decorating each cupcake. On Friday, she spent 58 minutes baking pies, and decorated the same number of cupcakes at an average of 1.7 minutes per cupcake. If she spent the same total amount of time preparing on Thursday as she did on Friday, how many cupcakes did she decorate each day?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – B

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

A sailboat rental company charges customers a fee of $78.75 plus $80.25 per hour to rent a sailboat. A second rental company charges customers a fee of $40 plus $95.75 per hour to rent a sailboat. How many hours would a customer have to rent a sailboat in order for both companies to charge the same total amount?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – C

Name _____

Date _____Pd_____

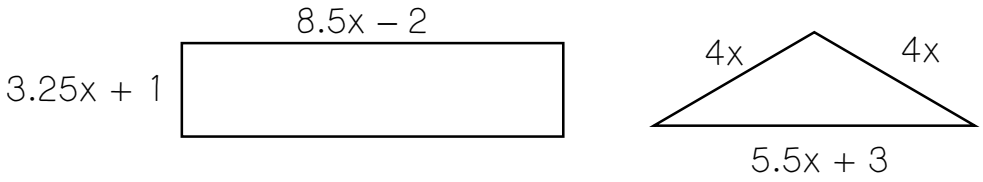
WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

The two figures below have the same perimeter. What is the value of x?



STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – C

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

Nikki has 186 yards of fabric in her supply room and uses $5\frac{3}{4}$ yards of fabric per day making products for her shop. Jamie has 95 yards of fabric in her supply room and uses $2\frac{1}{2}$ yards of fabric per day making products. If neither of the girls buys more fabric, how many days will it take until they have the same number of remaining yards of fabric in their supply rooms?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: _____

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

x = _____

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table - A

Name Answer Key
Date _____ Pd_____

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

A skier can choose between buying a season pass or paying to ski daily. A daily pass costs $47.50 per day and includes ski rentals. A season ski pass costs a one-time fee of $390 and a daily fee of $17.50 for ski rentals. How many days would the skier have to go skiing in order for both options to cost the same amount?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $47.50x = 390 + 17.50x$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 13$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$47.50x = 390 + 17.50x$$
$$47.50(13) = 390 + 17.50(13)$$
$$617.50 = 617.50$$

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – A

(Answer Key)

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

19 less than a number is the same as the sum of half the number and six. What is the number?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $x - 19 = \frac{1}{2}x + 6$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 50$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$x - 19 = \frac{1}{2}x + 6$$

$$50 - 19 = \frac{1}{2}(50) + 6$$

$$31 = 31$$

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – B

Name Answer Key
Date _____ Pd_____

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

On Thursday morning a bakery owner prepared by baking several pies and decorating cupcakes. She spent 90 minutes baking the pies and an average of 1.2 minutes decorating each cupcake. On Friday, she spent 58 minutes baking pies and decorated the same number of cupcakes at an average of 1.7 minutes per cupcake. If she spent the same total amount of time preparing on Thursday as she did on Friday, how many cupcakes did she decorate each day?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $90 + 1.2x = 58 + 1.7x$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 64$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$90 + 1.2x = 58 + 1.7x$$
$$90 + 1.2(64) = 58 + 1.7(64)$$
$$166.8 = 166.8$$

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – B

(Answer Key)

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

A sailboat rental company charges customers a fee of $78.75 plus $80.25 per hour to rent a sailboat. A second rental company charges customers a fee of $40 plus $95.75 per hour to rent a sailboat. How many hours would a customer have to rent a sailboat in order for both companies to charge the same total amount?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $78.75 + 80.25x = 40 + 95.75x$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 2.5$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$78.75 + 80.25x = 40 + 95.75x$$
$$78.75 + 80.25(2.5) = 40 + 95.75(2.5)$$
$$279.38 = 279.38$$

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – C

Name Answer Key
Date _____ Pd_____

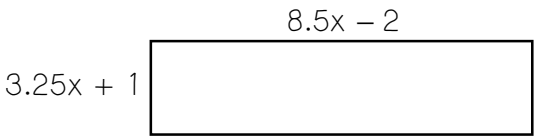
WRITING AND SOLVING EQUATIONS : ROUND TABLE

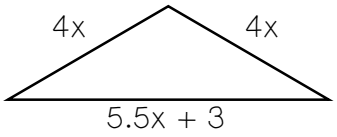
1. Determine who will be person A, B, and C. List this below.
2. Solve ONLY one step, then pass your paper clockwise.
3. Be sure to check the prior step and initial in the box before working your own step!
4. Continue until you get your original paper back.

A: _____ **B:** _____ **C:** _____

SITUATION:

The two figures below have the same perimeter. What is the value of x?





STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $23.5x - 2 = 13.5x + 3$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 0.5$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$23.5x - 2 = 13.5x + 3$$
$$23.5(0.5) - 2 = 13.5(0.5) + 3$$
$$9.75 = 9.75$$

Person from Step 1, check and initial → ☐

Unit: Linear Equations
Round Table – C

(Answer Key)

WRITING AND SOLVING EQUATIONS : ROUND TABLE

1. Determine who will be person A, B, and C. List this below.
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A: _____ **B:** _____ **C:** _____

SITUATION:

Nikki has 186 yards of fabric in her supply room and uses $5\frac{3}{4}$ yards of fabric per day making products for her shop. Jamie has 95 yards of fabric in her supply room and uses $2\frac{1}{2}$ yards of fabric per day making products. If neither of the girls buys more fabric, how many days will it take until they have the same number of remaining yards of fabric in their supply rooms?

STEP 1:

Write an equation that can be used to represent the situation above:

Equation: $186 - 5\frac{3}{4}x = 95 - 2\frac{1}{2}x$

Person from Step 2, check and initial → ☐

STEP 2:

First, check the work in Step #1 and initial in the box. Next, solve the equation, and show your work:

$x = 28$

Person from Step 3, check and initial → ☐

STEP 3:

First, check the work in Step #2 and initial in the box. Next, prove the solution by plugging it into both sides of the equation. Show your work:

$$186 - 5\frac{3}{4}x = 95 - 2\frac{1}{2}x$$
$$186 - 5\frac{3}{4}(28) = 95 - 2\frac{1}{2}(28)$$
$$25 = 25$$

Person from Step 1, check and initial → ☐