Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_

**4.6B Linear Word Problems in Standard Form\_Classwork**

*HW: 4.6B worksheet*

Use the equation in standard form,if the problem is given a total value.

Use the equation in slope-intercept form, $y=mx+b$ if the problem is given an initial value and a constant rate of change (slope).

***Write equation in slope-intercept form. Identify the slope and y-intercept.***

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| 1. Mia has $60 in her piggy bank. Each day she decides to put in $5.

EQUATION: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_slope: \_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The amusement park charges $15 for admission and $3 per ride.

EQUATION: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_slope: \_\_\_\_\_\_\_\_\_\_ y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_ |

***Write equation in standard form.***

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| 1. A 100-point test has *x* questions worth 2 points apiece and *y* questions worth 4 points apiece.

What do the variables stand for: x =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What is the total? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. Write an equation that describes all possible numbers of questions that may be on the test.
 | 1. If you have 24 questions worth 4 points apiece, how many questions will be worth 2 points apiece? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| 1. The Remy family bought 4 sandwiches and 3 salads. They spent $24. Let *x* be the cost of a sandwich and *y* be the cost of a salad.

What do the variables stand for: x =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What is the total? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. Write an equation.
 | 1. If each sandwich costs $3.75, how much did each salad cost? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| 1. Louise has $36 in five-dollar bills and singles.

What do the variables stand for: x =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What is the total? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. Write an equation.
 | 1. If Louise has 2 five-dollar bills, how many singles does she have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| 1. The cost y (in dollars) to rent a camping tent is proportional to the number x of days that the tent is rented. It costs $84 to rent a tent for 7 days. Write an equation that represents the cost to rent a camping tent for x days.
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| 1. A taxi ride in Detroit costs $11 for 2 miles and $18 for 4 miles. Let x be the number of miles and y be the total fare.
2. Write an equation in slope intercept form that represents the situation.
3. What is the initial fee?
4. What is the price per mile?
5. How much would it cost to take the same taxi for 10 miles?
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| 1. You are in charge of buying food for your family reunion. You spend $90 on hamburgers and turkey burgers. You pay $1.50 for each hamburger and $2 for each turkey burger. Let x be the number of hamburgers and y be the number of turkey burgers.

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| 1. Write an equation.
 | 1. If you bought 30 turkey burgers, how many hamburgers did you buy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| 1. You are selling drinks at the carnival to raise money for your club. You sell lemonade for $2 per cup and orange drinks for $3 per cup. Your sales totaled $240. Let x be the number of cups of lemonade and y be the number of orange drinks.

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| 1. Write an equation.
 | 1. If you sold 60 cups of lemonade, how many cups of orange drink did you sell? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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