

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Metric Conversions Homework**

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**Answer the following questions using metric conversions.**

1. Sally is on the All-City track team and has to run the 100-meter dash. How many decameters will she run?
2. Each year, the New York City Marathon which is 42 km, is run by thousands of people. If you and two friends go run the marathon, how many meters will all three of you run?
3. A recipe for shortbread cookies calls for 5 grams of butter to make 12 cookies. How many decigrams will there be in 60 cookies?
4. Susan's car has a 40-liter gas tank. If it takes four tanks of gas to go to Florida and back, will she have enough gas if she can only afford to buy 2 hectoliters?
5. Five-year-old Michelle weighs 75 decagrams. What is her weight in centigrams?
6. The doctor told Cheryl to drink 4 liters of water a day. After 7 days, how many milliliters of water did Cheryl drink? If she has to drink a minimum of 80,000 milliliters before she can participate in sports, how many days should it take?

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**Properties of Equalities**

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Identify the property of equality that justifies each missing step or equation in each of the following tables.

1.

<b>Equation</b>	<b>Steps</b>
1. $3x + 12 = 8x - 18$	Given
2. $12 = 5x - 18$	
3.	Addition Property of Equality
4. $6 = x$	

2.

<b>Equation</b>	<b>Steps</b>
1. $3k + 5 = 17$	Given
2. $3k = 12$	
3.	Division Property of Equality

3.

<b>Equation</b>	<b>Steps</b>
1. $-6a - 5 = -95$	Given
2.	
3.	

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4.

Equation	Steps
1. $3(5x + 1) = 13x + 5$	Given
2.	
3.	
4.	
5.	

5.

Equation	Steps
1. $7y - 84 = 2y + 61$	Given
2.	
3.	
4.	

6.

Equation	Steps
1. $4(5n + 7) - 3n = 3(4n - 9)$	Given
2.	
3.	
4.	
5.	
6.	