## Unit 4 Lesson 6 Cumulative Practice Problems

1. For each diagram, decide if $y$ is an increase or a decrease relative to $x$. Then determine the percent increase or decrease.
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1. Draw diagrams to represent the following situations.
	1. The amount of flour that the bakery used this month was a 50% increase relative to last month.
	2. The amount of milk that the bakery used this month was a 75% decrease relative to last month.
2. Write each percent increase or decrease as a percentage of the initial amount. The first one is done for you.
	1. This year, there was 40% more snow than last year.
	* *The amount of snow this year is 140% of the amount of snow last year.*
	1. This year, there were 25% fewer sunny days than last year.
	2. Compared to last month, there was a 50% increase in the number of houses sold this month.
	3. The runner’s time to complete the marathon was a 10% less than the time to complete the last marathon.
3. The graph shows the relationship between the diameter and the circumference of a circle with the point $(1,π)$ shown. Find 3 more points that are on the line.
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* (From Unit 3, Lesson 3.)
1. Priya bought $x$ grams of flour. Clare bought $\frac{3}{8}$ more than that. Select **all** equations that represent the relationship between the amount of flour that Priya bought, $x$, and the amount of flour that Clare bought, $y$.
	1. $y=\frac{3}{8}x$
	2. $y=\frac{5}{8}x$
	3. $y=x+\frac{3}{8}x$
	4. $y=x−\frac{3}{8}x$
	5. $y=\frac{11}{8}x$
* (From Unit 4, Lesson 4.)



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