Percent Increase and Decrease

Write the change first, then divide by the original. For a new amount, write the multiplier before you compute.

Name _____ Date _____

Words we use

say the math word, then the plain English

WORD	PLAIN ENGLISH	WHAT YOU DO
Percent increase	How much it grew, as a percent of where it started.	Change divided by the original, then to a percent.
Percent decrease	How much it shrank, as a percent of where it started.	Same division, and say decrease.
Original	The starting amount.	Always the thing you divide by.
Change	New minus original, or original minus new.	Find it first.

Part A Town A and Town B

1. Town A: 5,000 to 8,000. Percent increase?

2. Town B: 6,000 to 9,000. Percent increase?

3. What was Brian right about? What was Darlene right about?

Part B Find the percent change

FROM	TO	CHANGE	CHANGE OVER ORIGINAL	PERCENT CHANGE
$50	$35			
40 cm	50 cm			
$20	$25			
250	300			

Part C Find the new amount

1. 70 employees grow by 10 percent. Multiplier and new count?

2. 400 students fall by 15 percent. Multiplier and new count?

3. After a 10 percent increase, a company has 77 employees. How many before?

4. After a 20 percent decrease, a jacket costs $48. Original price?

Part D Exit ticket

1. A plant grows from 40 cm to 50 cm. Percent increase?

2. 70 employees grow by 10 percent. How many now?

3. Two towns each add 3,000 people, from 5,000 and from 6,000. Which grew by a bigger percent?

Answer key

Part A. 1. 60%. 2. 50%. 3. Brian: the amount, 3,000 each. Darlene: the percent, Town A grew more.

Part B. $15, 15/50, 30% decrease. 10, 10/40, 25% increase. $5, 5/20, 25% increase. 50, 50/250, 20% increase.

Part C. 1. 1.10; 77. 2. 0.85; 340. 3. 70. 4. $60.

Part D. 1. 25%. 2. 77. 3. The one from 5,000: 60% against 50%.