## Percent Word Problems as Decimal Expressions

Name:

**Determine which expression is the correct answer.**

**Answers**

1) Last year the price of a college textbook(b) was $247. This year the price will be 9% higher. Which expression shows the difference in price from last year to this year?
   A. b - 0.09      B. b × 0.09      C. b - 1.09      D. b - 9

2) A company was having a sale for 14% off the price of computer monitors. Which expression shows how much money you would save if you bought monitors for z dollars a piece?
   A. 23z - 0.14      B. 0.14 × 23z      C. 23z + 0.14      D. 23z + 1.14

3) A box of cereal advertised having 47% more marshmallows. The original cereal had y cups of marshmallow. Which expression shows the how many cups of marshmallows the new cereal has?
   A. y × 0.47      B. y + 0.47      C. y + (0.47 × y)      D. y + 1.47

4) Joe was earning $10 an hour before his raise. After his 5% raise he was making $10.5 an hour. Which expression shows how his new hourly rate was calculated?
   A. 10 × 0.05      B. 10 + 0.05      C. 10 + 1.05      D. 10 × 1.05

5) An icecream bar was 510 calories. If they increased the size of the bar by 8% which expression can be used to find the new calorie count?
   A. 510 × 0.08      B. 510 + 0.08      C. 510 + 1.08      D. 510 × 1.08

6) A store raised the price on watermelons 6%. The original price for each was X dollars. Which expression shows the new price of the watermelons?
   A. X + 1.06      B. X + 0.06      C. X × 0.06      D. X + (0.06 × X)

7) This years model of a cell phone is 12 percent heavier than last years. This years model weight is represent by w. Which expression can be used to calculate the weight of last years model?
   A. w × 0.12      B. w - 0.12      C. w ÷ 1.12      D. w - 1.12

8) While clearing out some old inventory a store offered 5 percent off of any item(i). Which expression can be used to calculate the new cost of an item?
   A. i - 1.05      B. i × 0.05      C. i - 0.05i      D. i - 0.05

9) Ned drew a square with each side being exactly 15 centimeters long. If he wanted to make the square 13% larger which expression can he use to find the new sides length?
   A. 15 + 1.13      B. 15 + 0.13      C. 15 × 0.13      D. 15 × 1.13

10) A sandwich shop was charging $2.57 for a sandwich, but raised the price 10% making them cost $2.83. Which expression shows how the new price was calculated?
   A. 2.57 + 0.1      B. 2.57 × 0.1      C. 2.57 × 1.1      D. 2.57 + 1.1

1. ____  2. ____  3. ____  4. ____  5. ____  6. ____  7. ____  8. ____  9. ____  10. ____

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1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

**Determine which expression is the correct answer.**

| | **Answers** |
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1) Last year the price of a college textbook(b) was $247. This year the price will be 9% higher. Which expression shows the difference in price from last year to this year?

   A. b - 0.09          B. b × 0.09          C. b - 1.09          D. b - 9

1. **B**

2) A company was having a sale for 14% off the price of computer monitors. Which expression shows how much money you would save if you bought monitors for z dollars a piece?

   A. 23z - 0.14          B. 0.14 × 23z          C. 23z + 0.14          D. 23z + 1.14

2. **B**

3) A box of cereal advertised having 47% more marshmallows. The original cereal had y cups of marshmallow. Which expression shows the how many cups of marshmallows the new cereal has?

   A. y × 0.47          B. y + 0.47          C. y + (0.47 × y)          D. y + 1.47

3. **C**

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   A. 10 × 0.05          B. 10 + 0.05          C. 10 + 1.05          D. 10 × 1.05

4. **D**

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   A. 510 × 0.08          B. 510 + 0.08          C. 510 + 1.08          D. 510 × 1.08

5. **D**

6) A store raised the price on watermelons 6%. The original price for each was X dollars. Which expression shows the new price of the watermelons?

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6. **D**

7) This years model of a cell phone is 12 percent heavier than last years. This years model weight is represent by w. Which expression can be used to calculate the weight of last years model?

   A. w × 0.12          B. w - 0.12          C. w ÷ 1.12          D. w - 1.12

7. **C**

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   A. i - 1.05          B. i × 0.05          C. i - 0.05i          D. i - 0.05

8. **C**

9) Ned drew a square with each side being exactly 15 centimeters long. If he wanted to make the square 13% larger which expression can he use to find the new sides length?

   A. 15 + 1.13          B. 15 + 0.13          C. 15 × 0.13          D. 15 × 1.13

9. **D**

10) A sandwich shop was charging $2.57 for a sandwich, but raised the price 10% making them cost $2.83. Which expression shows how the new price was calculated?

   A. 2.57 + 0.1          B. 2.57 × 0.1          C. 2.57 × 1.1          D. 2.57 + 1.1

10. **C**