Percent Word Problems as Decimal Expressions

Determine which expression is the correct answer.

1) While clearing out some old inventory a store offered 50 percent off of any item. Which expression can be used to calculate the new cost of an item?
   A. i - 0.5  
   B. i × 1.5  
   C. i - 1.5  
   D. i - 0.5i

2) A mall kiosk needed to buy 39 new cell phone cases at z dollars a piece. Because they were buying so many they got 15% off the price. Which expression shows how much money they saved?
   A. 39z + 1.15  
   B. 0.15 × 39z  
   C. 39z + 0.15  
   D. 39z - 0.15

3) This year’s model of a cell phone is 10 percent heavier than last year’s. This year’s model weight is represented by w. Which expression can be used to calculate the weight of last year’s model?
   A. w × 0.1  
   B. w - 1.1  
   C. w - 0.1  
   D. w ÷ 1.1

4) A company was having a sale for 15% off the price of computer monitors. Which expression shows how much money you would save if you bought 29 monitors for z dollars a piece?
   A. 29z + 0.15  
   B. 29z - 0.15  
   C. 29z + 1.15  
   D. 0.15 × 29z

5) Joe was earning $6 an hour before his raise. After his 5% raise he was making $6.3 an hour. Which expression shows how his new hourly rate was calculated?
   A. 6 + 0.05  
   B. 6 + 1.05  
   C. 6 × 0.05  
   D. 6 × 1.05

6) Over the summer gas prices dropped 3%. Which expression shows the new price of a gallon of gas? (the old price is represented by g)
   A. g - 0.03  
   B. g - 0.03g  
   C. g × 0.03  
   D. g - 1.03

7) A store raised the price on watermelons 2%. The original price for each was X dollars. Which expression shows the new price of the watermelons?
   A. X + 0.02  
   B. X × 0.02  
   C. X + (0.02 × X)  
   D. X + 1.02

8) A house was on sell for $24,446. If you wanted to offer 10% less than the asking price(p) which expression shows how much you should offer?
   A. p - 1.1  
   B. p × 0.1  
   C. p - 0.1  
   D. p - 0.1p

9) Last year the price of a college textbook(b) was $206. This year the price will be 7% higher. Which expression shows the difference in price from last year to this year?
   A. b - 7  
   B. b - 1.07  
   C. b - 0.07  
   D. b × 0.07

10) A box of cereal advertised having 13% 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 + 0.13  
    B. y + (0.13 × y)  
    C. y + 1.13  
    D. y × 0.13
Determine which expression is the correct answer.

1) While clearing out some old inventory a store offered 50 percent off of any item. Which expression can be used to calculate the new cost of an item?
   A. \(i - 0.5\)  
   B. \(i \times 1.5\)  
   C. \(i - 1.5\)  
   D. \(i - 0.5i\)

2) A mall kiosk needed to buy 39 new cell phone cases at \(z\) dollars a piece. Because they were buying so many they got 15% off the price. Which expression shows how much money they saved?
   A. \(39z + 1.15\)  
   B. \(0.15 \times 39z\)  
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   A. \(w \times 0.1\)  
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   C. \(w - 0.1\)  
   D. \(w ÷ 1.1\)

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