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UNIT 6 LESSON 9

**AIM**: SWBAT solve contextual problems with markups and markdowns

**THINK ABOUT IT!**

Home Depot buys a portable heater from a manufacturer for $80. Home Depot applies a markup of 50% to sell the heater at their store. Use a double number line to represent the problem and write and solve an equation to determine how much you would pay for the heater if you bought it at Home Depot.

Key Point:

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**Interaction with New Material**

**Ex.1)** Best Buy purchases their tv’s straight from the companies that produce them (e.g. Sony, LG, Panasonic, etc.). Best Buy has a standard markup of 125% on all televisions that they sell in their store. During a holiday, they have a 40% off sale on all their tv’s. If the sale is applied after the 125% markup, what is the price of the tv during the holiday sale that originally cost Best Buy $500? How much profit does Best Buy make on the tv?

**PARTNER PRACTICE**

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| *Bachelor Level* |

1. A boat is marked up 20% on the original price. The original price was $50. What is the sale price of the boat before sales tax?

a) $10

b) $40

c) $60

d) $70

Choose one answer choice above and explain why it is unreasonable.

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1. A football is marked down 35% off the original price. The original price was $60. What is the sale price of the football?

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| *Master Level* |

1. Zack has an old car. He wants to sell at a markup of 19% the current price. The market price is $1,120. How much money would he receive in exchange for the car if he could sell it at that rate?

**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

1. What is the original price if there is a 10% discount and the sale price is $76.50?
2. Timmy wants to buy a scooter and the price was $50. When he goes to the store a second time, he found that price was marked down by 20%. Which statements below are true? Select all that apply.

a) The scooter is now cheaper than when he saw it originally

b) The new cost of the scooter is more than $50

c) He can determine the new cost of the scooter by multiplying 50 by 0.2

c) He can determine the new cost of the scooter by multiplying 50 by 1.2

Find the cost of the scooter.

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| *Master Level* |

1. A painting is marked down 52.5% off. The sale price is $320. What was the original price to the nearest cent?
2. A winter coat that was original purchased at $65 was marked up to $70.20. What is the percent of markup?
3. An original Captain America comic book is valued at $270 and is marked up by 33% to be sold at Comic World. Gary buys it at this price and sells it to his friend at an additional markup of 5%. How much money did Gary make in this deal?
4. Gas stations all buy their gas at the same price. Gas prices are different based on the markup that each station uses to sell gas. Gas station A applies a markup of 4.2% and Gas station B applies a markup of 5.1%. How much more would someone spend on gas if they went to Gas Station B and both stations bought their gas at an original price of $2.40 (round to the nearest cent)?

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| *PhD Level* |

1. A coat is originally $250 but is placed on sale at a markdown of 15%. Winston has a coupon for an additional 10% off any sale price. Winston says that he can add the two markdowns together to for a combined 25% markdown. His mom says that you have to apply the first markdown and then apply the second markdown to the sale price. Are the two both correct? If not, who is correct? Prove and explain by calculating using both methods.

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**EXIT TICKET**

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| Self-assessment | I mastered the learning objective today. | I am almost there. | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there. | You need more practice and feedback. |

1. Games Galore buys videogames at the wholesale price of $30.00. The markup rate at Games Galore is 40%. How much would you pay for the game at Games Galore (not including tax)?
2. Target is having a huge winter season sale on all of their televisions. A 42in screen tv that usually retails at $580 is marked down by 20%. If you brought $450 to the store, do you have enough money to buy the tv? Explain your reasoning.