LESSON MAKER PRO

Price Change Power

Estimate and find prices after one discount or markup.

GRADE 8 · 8.CE.1.a

8.CE.1.a "Estimate and solve contextual problems that require the computation of one discount or markup and the resulting sale price."

NAME _____ DATE _____

FIND THE NEW PRICE

A discount lowers the original price, so find the discount amount and subtract it. A markup raises the original price, so find the markup amount and add it. To estimate, round the final price to the nearest dollar.

WORKED EXAMPLE

A $84 backpack is discounted 25%. What is the sale price?

1. Change 25% to 0.25.
2. Find the discount: 84 x 0.25 = 21.
3. Subtract the discount: 84 - 21 = 63.

Answer: Answer: The sale price is $63.

PRACTICE 6 problems

1 A $40 hoodie is discounted 10%. Estimate the sale price to the nearest dollar, then find the exact sale price.

ANSWER _____

2 A $60 game pass has a 20% markup. Estimate the new price to the nearest dollar, then find the exact price.

ANSWER _____

3 A $48 pair of headphones is discounted 15%. Estimate the sale price to the nearest dollar, then find the exact sale price.

ANSWER _____

4 A $35 sketchbook has a 30% markup. Estimate the new price to the nearest dollar, then find the exact price.

ANSWER _____

5 A $90 concert ticket is discounted 15%. Estimate the sale price to the nearest dollar, then find the exact sale price.

ANSWER _____

6 A $120 bike light has a 5% markup. Estimate the new price to the nearest dollar, then find the exact price.

ANSWER _____

APPLY IT Show your work

1 A gaming store sells a controller for $80. During a weekend sale, the controller is 30% off. Estimate the sale price to the nearest dollar, then find the exact sale price.

WORK SPACE

ANSWER _____

2 A student music club buys plain shirts for $50 each and adds an 18% markup before selling them. Estimate the selling price to the nearest dollar, then find the exact price.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A $160 pair of wireless earbuds is advertised as 35% off. The sign says the sale price is $104. Is the sign correct? Explain by finding the discount and the sale price.

WORK SPACE AND ANSWER

ANSWER KEY

Price Change Power

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A $40 hoodie is discounted 10%. Estimate the sale price to the nearest dollar, then find the exact sale price.	**Estimate: $36. Exact sale price: $36.00.**
2	A $60 game pass has a 20% markup. Estimate the new price to the nearest dollar, then find the exact price.	**Estimate: $72. Exact price: $72.00.**
3	A $48 pair of headphones is discounted 15%. Estimate the sale price to the nearest dollar, then find the exact sale price.	**Estimate: $41. Exact sale price: $40.80.**
4	A $35 sketchbook has a 30% markup. Estimate the new price to the nearest dollar, then find the exact price.	**Estimate: $46. Exact price: $45.50.**
5	A $90 concert ticket is discounted 15%. Estimate the sale price to the nearest dollar, then find the exact sale price.	**Estimate: $77. Exact sale price: $76.50.**
6	A $120 bike light has a 5% markup. Estimate the new price to the nearest dollar, then find the exact price.	**Estimate: $126. Exact price: $126.00.**

PART 2 · APPLY IT

1. **Estimate: $56. Exact sale price: $56.00.** Find 30% of $80, which is $24. Subtract $24 from $80.
2. **Estimate: $59. Exact price: $59.00.** Find 18% of $50, which is $9. Add $9 to $50.

CHALLENGE

Yes. The discount is $56, and the sale price is $104.

Accept equivalent money forms, such as $36 and $36.00, for exact prices. Estimates should be the exact final prices rounded to the nearest whole dollar.