

ENTREPRENEUR Fair (PART 4-GROUP)

Please read through the following directions for each part carefully. You may not move on to the next step until you have had the teacher's approval and signature.



1. MARKUPS AND MARKDOWNS



**2. COUPONS, MARKUPS/DOWNS,
AND TAX COMBINATIONS**

3. PROFIT RATIOS





MARKUPS

(BUSINESS PARTNER #1)



A COMPANY MAY CHOOSE TO MARK UP THE PRICE OF AN ITEM IF THE DEMAND IS HIGH.

CALCULATE THE PRICE OF PRODUCT #1 WITH A 10% MARKUP.
CALCULATE THE TOTAL PRICE OF YOUR MARKED-UP ITEM, INCLUDING 6.87% TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO THE NEAREST HUNDREDTH.

PRODUCT #1 PRICE: \$ _____

10% OF \$ _____ = \$ _____

TOTAL MARKUP AMOUNT:
\$ _____

ITEM PRICE W/ MARKUP:

NOW TAKE THE MARKUP PRICE AND CALCULATE IT WITH TAX.

0.06

0.008

0.0007

\$ _____

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PRODUCT PRICE W/ MARKUP+TAX = \$ _____

INVESTOR APPROVAL _____



MARKUPS

(BUSINESS PARTNER #1)



**CALCULATE THE PRICE OF PRODUCT #2 WITH A 15% MARKUP.
CALCULATE THE TOTAL PRICE OF YOUR MARKED-UP ITEM, INCLUDING 6.87%
TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO THE
NEAREST HUNDREDTH.**

PRODUCT #2 PRICE: \$ _____

10% OF \$ _____ = \$ _____

5% OF \$ _____ = \$ _____

TOTAL MARKUP AMOUNT:
\$ _____

ITEM PRICE W/ MARKUP:

NOW TAKE THE MARKUP PRICE AND CALCULATE IT WITH TAX.

0.06 0.008 0.0007

\$ _____

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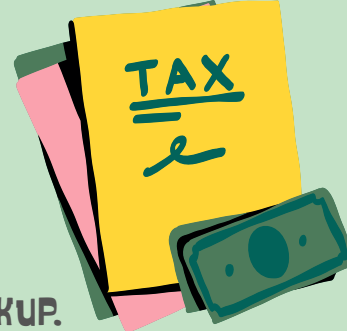
PRODUCT PRICE W/ MARKUP+TAX = \$_____

INVESTOR APPROVAL _____



MARKUPS

(BUSINESS PARTNER #1)



CALCULATE THE PRICE OF PRODUCT #3 WITH A 25% MARKUP.
CALCULATE THE TOTAL PRICE OF YOUR MARKED-UP ITEM, INCLUDING 6.87%
TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO THE
NEAREST HUNDREDTH.

PRODUCT #3 PRICE: \$ _____

10% OF \$ _____ = \$ _____

10% OF \$ _____ = \$ _____

5% OF \$ _____ = \$ _____

TOTAL MARKUP AMOUNT:
\$ _____

ITEM PRICE W/ MARKUP: _____

NOW TAKE THE MARKUP PRICE AND CALCULATE IT WITH TAX.

0.06

0.008

0.0007

\$ _____

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PRODUCT PRICE W/ MARKUP+TAX = \$ _____

INVESTOR APPROVAL _____



MARKDOWN

(BUSINESS PARTNER #2)



A COMPANY MAY CHOOSE TO MARK DOWN THE PRICE OF AN ITEM IF THE DEMAND IS LOW.

CALCULATE THE PRICE OF PRODUCT #1 WITH A 10% MARKDOWN.
CALCULATE THE TOTAL PRICE OF YOUR MARKED DOWN ITEM, INCLUDING
6.87% TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO
THE NEAREST HUNDREDTH.

PRODUCT #1 PRICE: \$ _____

10% OF \$ _____ = \$ _____

TOTAL MARKDOWN AMOUNT:
\$ _____

ITEM PRICE W/ MARKDOWN:

NOW TAKE THE MARKDOWN PRICE AND CALCULATE IT WITH TAX.

0.06

0.008

0.0007

\$ _____

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PRODUCT PRICE W/ MARKDOWN+TAX = \$ _____

INVESTOR APPROVAL _____



MARKDOWN

(BUSINESS PARTNER #2)



**CALCULATE THE PRICE OF PRODUCT #2 WITH A 15% MARKDOWN.
CALCULATE THE TOTAL PRICE OF YOUR MARKDOWN ITEM, INCLUDING 6.87%
TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO THE
NEAREST HUNDREDTH.**

PRODUCT #1 PRICE: \$ _____

10% OF \$ _____ = \$ _____

5% OF \$ _____ = \$ _____

TOTAL MARKDOWN AMOUNT:
\$ _____

ITEM PRICE W/ MARKDOWN:

NOW TAKE THE MARKDOWN PRICE AND CALCULATE IT WITH TAX.

	0.06	0.008	0.0007
\$ _____			

PRODUCT PRICE W/ MARKDOWN+TAX = \$_____

INVESTOR APPROVAL _____



MARKDOWN

(BUSINESS PARTNER #2)



CALCULATE THE PRICE OF PRODUCT #3 WITH A 25% MARKDOWN. CALCULATE THE TOTAL PRICE OF YOUR MARKDOWN ITEM, INCLUDING 6.87% TAX, USING AN AREA MODEL, AND ROUND YOUR FINAL ANSWER TO THE NEAREST HUNDREDTH.

PRODUCT #1 PRICE: \$ _____

10% OF \$ _____ = \$ _____

10% OF \$ _____ = \$ _____

5% OF \$ _____ = \$ _____

TOTAL MARKDOWN AMOUNT:
\$ _____

ITEM PRICE W/ MARKDOWN:

NOW TAKE THE MARKDOWN PRICE AND CALCULATE IT WITH TAX.

	0.06	0.008	0.0007
\$ _____			

PRODUCT PRICE W/ MARKDOWN+TAX = \$ _____

INVESTOR APPROVAL _____



COUPONS, MARKUPS/DOWNS, AND TAX COMBINATIONS



ALGEBRAIC PRICING FORMULA

$$P [(1-C) \cdot (1 \mp M) \cdot (1+T)]$$

P = PRICE OF MY ITEM

C = COUPON PERCENT

M = MARKUP/ MARKDOWN PERCENT
(1+M FOR a MARKUP OR 1-M FOR a MARKDOWN)

T = STATE SALES TAX
(ABOUT 6.87%, DEPENDING ON COUNTY)

EXAMPLE

PRODUCT #1

P=\$3.50 C=15% M=5% (MARKUP) T=6.87%

STEP 1: FILL IN ALL OF YOUR VALUES INTO THE PRICING FORMULA. (ALL PERCENTAGES ARE DIVIDED BY 100).

$$\$3.50 [(1 - 0.15) \cdot (1 + 0.05) \cdot (1 + 0.0687)] =$$

STEP 2: COMPLETE ALL STEPS IN THE PARENTHESES FIRST (PEMDAS)

$$\$3.50 [(0.85) \cdot (1.05) \cdot (1.0687)] =$$

STEP 3: MULTIPLY ALL THE VALUES THAT ARE WITHIN THE PARENTHESES.

$$\$3.50 \cdot (0.95381475) = 3.338351625$$

STEP 4: MULTIPLY THE ITEM PRICE BY THE DISCOUNT AND THE MARKUP OR MARKDOWN. WRITE YOUR FINAL ANSWER ROUNDED TO THE NEAREST HUNDREDTH.

TOTAL PRICE= \$3.34



COUPON, MARKUP, and Tax

(BUSINESS PARTNER #1)



PRODUCT #1

P=\$_____ C=25% M=10% (MARKUP) T=6.87%

STEP 1: FILL IN THE MISSING VALUES BY DIVIDING EACH % BY 100.

\$_____ [(1 - _____) · (1 + _____) · (1 + _____)]

STEP 2: MULTIPLY EACH PARENTHESIS INDIVIDUALLY.

\$_____ [(_____) · (_____) · (_____)]=

STEP 3: MULTIPLY ALL THE VALUES THAT ARE WITHIN THE PARENTHESSES

\$_____ (_____)=

STEP 4: WRITE YOUR FINAL ANSWER ROUNDED TO THE NEAREST HUNDREDTH.

TOTAL PRICE= \$ _____

INVESTOR APPROVAL _____



COUPON, MARKDOWN, and Tax

(BUSINESS PARTNER #2)

PRODUCT #2

P=\$_____ C=15% M=5% (MARKDOWN) T=6.87%

STEP 1: FILL IN THE MISSING VALUES BY DIVIDING EACH % BY 100.

\$_____ [(1 - _____) · (1 - _____) · (1 + _____)]

STEP 2: MULTIPLY EACH PARENTHESIS INDIVIDUALLY.

\$_____ [(_____) · (_____) · (_____)]=

STEP 3: MULTIPLY ALL THE VALUES THAT ARE WITHIN THE PARENTHESSES

\$_____ (_____)=

STEP 4: WRITE YOUR FINAL ANSWER ROUNDED TO THE NEAREST HUNDREDTH.

TOTAL PRICE= \$ _____

INVESTOR APPROVAL _____



COUPON, MARKUP OR MARKDOWN (YOU CHOOSE), and Tax (BUSINESS PARTNER #1 OR #2)



PRODUCT #3

P=\$_____ C=30% M=25% T=6.87%

STEP 1: FILL IN THE MISSING VALUES BY DIVIDING EACH % BY 100.

\$_____ [(1 - _____) · (1 ± _____) · (1 + _____)]

STEP 2: MULTIPLY EACH PARENTHESIS INDIVIDUALLY.

\$_____ [(_____) · (_____) · (_____)]=

STEP 3: MULTIPLY ALL THE VALUES THAT ARE WITHIN THE PARENTHESSES

\$_____ (_____)=

STEP 4: WRITE YOUR FINAL ANSWER ROUNDED TO THE NEAREST HUNDREDTH.

TOTAL PRICE= \$ _____

INVESTOR APPROVAL _____



PROFIT RATIOS

LET'S FIRST CREATE THE ALGEBRAIC EQUATIONS THAT WE WILL USE TO HELP US WITH THE FOLLOWING PAGES.

P= PROFIT

S=SELLING PRICE

C=COST TO MAKE THE PRODUCT

WRITE AND SOLVE: (FILL IN THE EQUATION WITH THE MISSING VARIABLE)

$$S - \underline{\hspace{2cm}} = P$$

WRITE AND SOLVE: (FILL IN THE EQUATION WITH THE MISSING VARIABLES)

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = S$$

WRITE AND SOLVE: (FILL IN THE EQUATION WITH THE MISSING VARIABLES)

$$\underline{\hspace{2cm}} - P = \underline{\hspace{2cm}}$$

INVESTOR APPROVAL



PROFIT RATIOS

BUSINESS PARTNER #1



PRODUCT #1

STEP 1: IDENTIFY THE VALUE FOR YOUR VARIABLES.

S= \$ _____

C=\$ _____

P=? _____

STEP 2: WRITE ALGEBRAIC EQUATIONS (BASED ON THE EQUATIONS YOU CREATED FROM THE PREVIOUS PAGE)

.

_____ - _____ = _____

_____ = _____ + _____

_____ - _____ = _____

STEP 3: WRITE THE PROFIT-TO-COST RATIO USING THE FORM P:C IN SIMPLEST TERMS.

INVESTOR APPROVAL _____



PROFIT RATIOS

BUSINESS PARTNER #2



PRODUCT #2

STEP 1: IDENTIFY THE VALUE FOR YOUR VARIABLES.

S= \$ _____

C=\$ _____

P=? _____

STEP 2: WRITE ALGEBRAIC EQUATIONS (BASED ON THE EQUATIONS YOU CREATED FROM THE PREVIOUS PAGE)

_____ - _____ = _____

_____ = _____ + _____

_____ - _____ = _____

STEP 3: WRITE THE PROFIT-TO-COST RATIO USING THE FORM P:C IN SIMPLEST TERMS.

INVESTOR APPROVAL _____



PROFIT RATIOS

BUSINESS PARTNER #1 OR #2



PRODUCT #3

STEP 1: IDENTIFY THE VALUE FOR YOUR VARIABLES.

S= \$ _____

C=\$ _____

P=? _____

STEP 2: WRITE ALGEBRAIC EQUATIONS (BASED ON THE EQUATIONS YOU CREATED FROM THE PREVIOUS PAGE)

_____ - _____ = _____

_____ = _____ + _____

_____ - _____ = _____

STEP 3: WRITE THE PROFIT-TO-COST RATIO USING THE FORM P:C IN SIMPLEST TERMS.

INVESTOR APPROVAL _____