

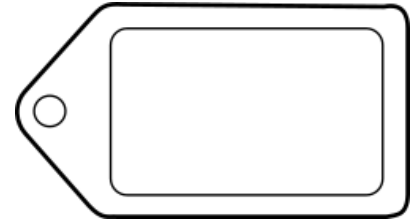
Calculating Prices

DIRECTIONS:

Work through the math questions below to practice calculating costs. Show your work.

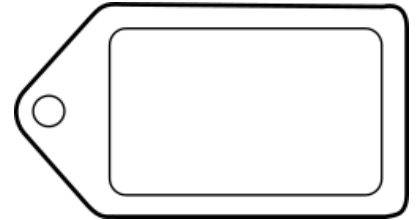
1. **How much does it cost to use a yard of ribbon?**

#9 satin ribbon
Cost \$4.99 per roll
100 yards per roll



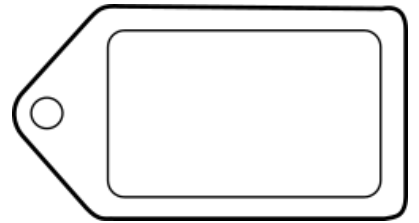
2. **How much does a glass vase cost?**

4-inch glass vase
Cost \$19.95 per case
24 containers per case



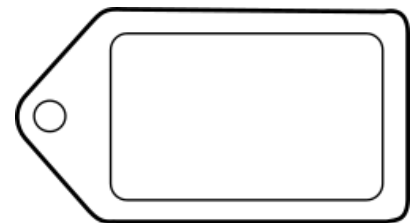
3. **How much does it cost to use half a block of floral foam?**

1 floral foam block
\$22.50 per block



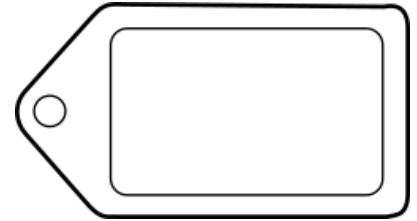
4. **How much does it cost to use a stem of leatherleaf fern?**

Leatherleaf fern
\$2.95 per bunch
20 stems per bunch



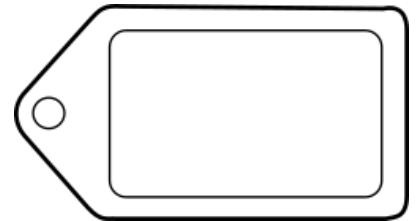
5. How much is a quarter bunch of baby's breath?

Baby's breath
\$3.49 per bunch
Determine by weight



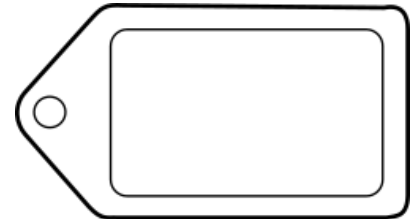
6. How much are 2 rose stems?

Hybrid tea roses
\$69.99 a bunch
25 stems per bunch



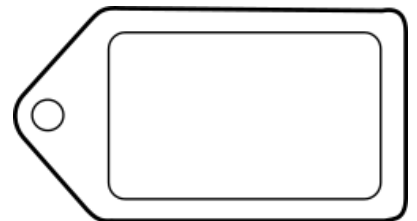
7. What is the retail price on a dozen roses in a bouquet sleeve with a ratio markup?

Sweetheart roses \$16.99 per bunch (25 stems)
Bouquet sleeve \$9.95 per pack (100 sleeves)



8. What is the retail price with a ratio markup on a boutonniere with a single rose, a stem of ruscus and a galax leaf? The arrangement uses a foot of floral tape, 6 inches of decorative wire and 2 boutonniere pins.

Sweetheart roses \$16.99 per bunch (25 stems)
Italian ruscus \$3.75 per bunch (5 stems)
Galax leaves \$5.95 per bunch (15 leaves)
Floral tape \$3.99 per roll (60 feet)
28-gauge wire \$2.97 per spool (150 feet)
Boutonniere pins \$3.99 per box (40 pins)



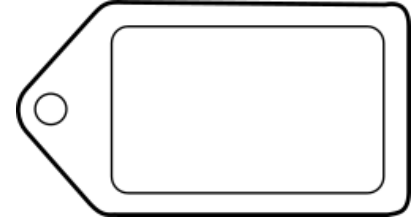
9. **What is the retail price of a glass vase arrangement that uses 12 carnations, 8 leatherleaf stems and half a bunch of baby's breath with a 40 percent markup?**

Carnations \$13.99 per bunch (15 stems)

Leatherleaf fern \$2.95 per bunch (20 stems)

Baby's breath \$3.49 per bunch (determine by weight)

Glass vase \$19.95 per case (24 vases)



10. **What is the retail price of a ceramic container arrangement that uses a third of floral foam block, a quarter bunch of springeri fern, 3 hybrid tea roses, 3 snapdragons and 3 hydrangeas with a 75 percent markup?**

Floral foam block \$22.60 per block

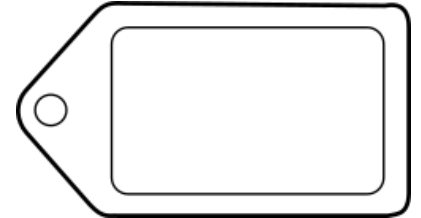
Springeri fern \$3.49 per bunch (determine by weight)

Hybrid tea roses \$69.99 per bunch (25 stems)

Snapdragons \$1.99 per bunch (10 stems)

White hydrangea \$49.95 per bunch (25 stems)

5-inch ceramic container \$34.99 per box (12 containers)



Calculating Prices KEY

1. How much does it cost to use a yard of ribbon?

#9 satin ribbon
Cost \$4.99 per roll
100 yards per roll

$$\begin{aligned} \text{Total cost/yards per roll} \\ \$4.99/100 &= \$0.0499 \end{aligned}$$



2. How much does a glass vase cost?

4-inch glass vase
Cost \$19.95 per case
24 containers per case

$$\begin{aligned} \text{Total cost/number of vases} \\ \$19.95/24 &= \$0.831 \end{aligned}$$



3. How much does it cost to use half a block of floral foam?

Floral foam block
\$22.50 per block

$$\begin{aligned} \text{Total cost X 0.5 (or } \frac{1}{2} \text{)} \\ \$22.50 \times 0.5 &= \$11.25 \end{aligned}$$



4. How much does it cost to use a stem of leatherleaf?

Leatherleaf fern
\$2.95 per bunch
20 stems per bunch

$$\begin{aligned} \text{Total cost/stems per bunch} \\ \$2.95/20 &= \$0.147 \end{aligned}$$



5. How much is a quarter bunch of baby's breath?

Baby's breath
\$3.49 per bunch
Determine by weight

$$\begin{aligned} \text{Total cost X 0.25 (or } \frac{1}{4} \text{)} \\ \$3.49 \times 0.25 &= \$0.872 \end{aligned}$$



6. How much are 2 rose stems?

Hybrid tea roses
\$69.99 a bunch
25 stems per bunch

$$\begin{aligned} \text{Total cost/stems per bunch} \\ \$69.99/25 &= \$2.80 \\ \text{Single item price X quantity} \\ \$2.80 \times 2 &= \$5.60 \end{aligned}$$



7. What is the retail price on a dozen roses in a bouquet sleeve with a ratio markup?

Sweetheart roses \$16.99 per bunch (25 stems)
Bouquet sleeve \$9.95 per pack (100 sleeves)

Total cost/amount in total
 $\$16.99/25 = \0.68 per stem
 $\$9.95/100 = \0.10 per sleeve

Individual price x quantity used
 $\$0.68 \times 12 = \8.16 subtotal for a dozen (fresh goods)
 $\$0.10 \times 1 = \0.10 subtotal for a sleeve (hard goods)

3:1 ratio markup on fresh goods subtotal
 $\$8.16 \times 3 = \24.48

2:1 ratio markup on hard goods subtotal
 $\$0.10 \times 2 = \0.20

Subtotals combined for final retail price
 $\$24.48 + 0.20 = \24.68



8. What is the retail price with a ratio markup on a boutonniere with a single rose, a stem of ruscus and a galax leaf? The arrangement uses a foot of floral tape, 6 inches of decorative wire, and 2 boutonniere pins.

Sweetheart roses \$16.99 per bunch (25 stems)
Italian ruscus \$3.75 per bunch (5 stems)
Galax leaves \$5.95 per bunch (15 leaves)
Floral tape \$3.99 per roll (60 feet)
28-gauge wire \$2.97 per spool (150 feet)
Boutonniere pins \$3.99 per box (40 pins)

Total cost/amount in total
 $\$16.99/25 = \0.68 per stem
 $\$3.75/5 = \0.75 per stem
 $\$5.95/15 = \0.40 per leaf
 $\$3.99/60 = \0.07 per foot
 $\$2.97/150 = \0.02 per foot
 $\$3.99/40 = \0.10 per pin

Subtotal fresh and hard goods (don't forget quantity!)
 $\$0.68(1 \text{ rose}) + \$0.75(1 \text{ ruscus}) + \$0.40(1 \text{ galax}) = \1.83 (fresh goods)
 $\$0.07(1' \text{ tape}) + \$0.01(6'' \text{ wire}) + \$0.20(2 \text{ pins}) = \$0.28$ (hard goods)

3:1 ratio markup on fresh goods subtotal
 $\$1.83 \times 3 = \5.49

2:1 ratio markup on hard goods subtotal
 $\$0.28 \times 2 = \0.56

Subtotals combined for final retail price
 $\$5.49 + \$0.56 = \$6.05$



9. **What is the retail price of a glass vase arrangement that uses 12 carnations, 8 leatherleaf stems, and half a bunch of baby's breath with a 40 percent markup?**

Carnations \$13.99 per bunch (15 stems)
Leatherleaf fern \$2.95 per bunch (20 stems)
Baby's breath 3.49 per bunch (determine by weight)
Glass Vase 19.95 per case (24 vases)

(Total cost/amount in total) X quantity used
 $\$13.99/15 = \0.93 per stem $0.93 \times 12 = \$11.16$ for 12
 $\$2.95/20 = \0.15 per stem $0.15 \times 8 = \$1.20$ for 8
 $\$3.49 \times 0.5$ (or $\frac{1}{2}$) = $\$1.75$ for half a bunch
 $\$19.95/24 = \0.83 for a glass vase

Subtotal of all items used
 $\$11.16 + \$1.20 + \$1.75 + \$0.83 = \$14.94$ subtotal

Calculate 40% markup cost from the subtotal
 $14.94 \times 0.40 = \$5.98$

Add the markup to the subtotal for the final retail price.
 $\$5.98 + \$14.94 = \$20.92$



10. **What is the retail price of a ceramic container arrangement that uses a third of floral foam block, a quarter bunch of springeri fern, 3 hybrid tea roses, 3 snapdragons and 3 hydrangeas with a 75 percent markup?**

Floral foam block \$22.60 per block
Springeri fern \$3.49 per bunch (determine by weight)
Hybrid tea roses \$69.99 per bunch (25 stems)
Snapdragons \$1.99 per bunch (10 stems)
White hydrangea \$49.95 per bunch (25 stems)
5-inch ceramic container \$34.99 per box (12 containers)

(Total cost/amount in total) X quantity used
 $\$22.60/3 = \7.50 for $\frac{1}{3}$ foam
 $\$3.49/4 = \0.87 for $\frac{1}{4}$ bunch
 $\$69.99/25 = \2.80 per stem $2.80 \times 3 = \$8.40$ for 3
 $\$1.99/10 = \0.20 per stem $0.20 \times 3 = \$0.60$ for 3
 $\$49.95/25 = \2.00 per stem $2.00 \times 3 = \$6.00$ for 3
 $\$34.99/12 = \2.92 for 1 container

Subtotal of all items used
 $\$7.50 + \$0.87 + \$8.40 + \$0.60 + \$6.00 + \$2.92 = \$26.29$ subtotal

Calculate 75% markup cost from the subtotal
 $\$26.29 \times 0.75 = \19.72

Add the markup to the subtotal for the final retail price.
 $\$19.72 + \$26.29 = \$46.01$



Floral Arranging Practicum Examples



FTD S11-4240

FLOWERS

- 15 Red Roses \$ _____
- 11 White Standard Carnations \$ _____
- 2 White Cushion Pompon stems \$ _____

GREENS

- 10 Leatherleaf stems \$ _____
- 3 Myrtle stems \$ _____
- 2 Plumosa stems \$ _____

ACCESSORIES AND HARDGOODS

- Card/Tape/Pic/Misc. \$ _____
- 2 Blocks Floral Foam \$ _____
- Container - Papier-Mâché 135K \$ _____
- 3 yds. Red Satin Ribbon, #9 \$ _____
- Freight \$ _____
- Total \$ _____

PRICING

Approximate Retail Price: \$ _____

This is a one-sided arrangement.

Approximate Measurement:

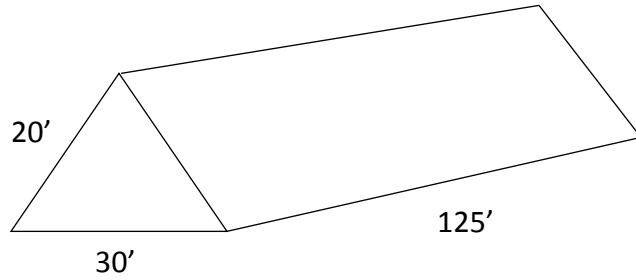
31" H x 34" W
79 H x 86 L CM

Item	Number of Stems Sold in Bunch, Box, or Roll	Price
Roses	25/ bunch	\$40.00/bunch
White Standard Carnations	25/bunch	\$15.00/bunch
White Cushion Pompon stems	6/bunch	\$16.00/bunch
Leatherleaf Stem	15/bunch	\$12.00/bunch
Myrtle Stem	10/bunch	\$8.00/bunch
Plumosa Stems	35/bunch	\$10.00/bunch
Floral Foam	20 blocks /box	\$22.00/box
#9 Ribbon	100 yds/roll	\$5.00/roll
Card		\$1.00
Paper Mache Container		\$2.00

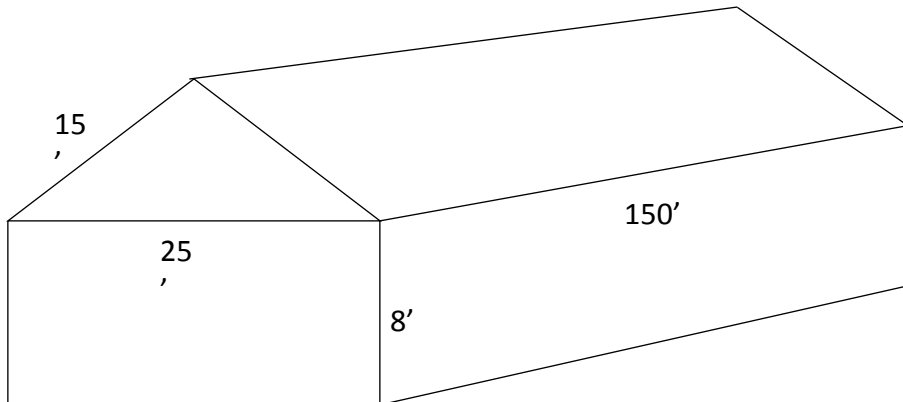
1. What is the cost per rose in this flower arrangement?
a. \$1.60 b. \$0.80 c. \$24.00 d. \$2.20
2. What is the cost of the #9 ribbon used in this arrangement?
a. \$0.05 b. \$0.15 c. 0.30 d. \$5.00
3. What is the cost of the leatherleaf used in this arrangement?
a. \$2.40 b. \$0.80 c. \$8.00 d. \$4.80
4. What type of arrangement is this?
a. One-sided b. 360 degree arrangement c. overhead d. two-sided
5. What is the total cost of greens in this arrangement?
a. \$35.94 b. \$10.98 c. \$5.35 d. \$10.40
6. What is the cost of flowers in this arrangement?
a. \$35.94 b. \$10.98 c. \$5.35 d. \$10.40
7. What is the total cost of hardgoods and accessories in this arrangement?
a. \$35.94 b. \$10.98 c. \$5.35 d. \$10.40
8. If a 40% markup is included, what is the retail price of this arrangement?
a. \$52.27 b. \$20.91 c. \$73.18 d. \$66.99
9. What is the height of the arrangement?
a. 25” b. 30’ c. 34” d. 31”
10. This arrangement would most likely be used:
a. as a centerpiece b. as a Thanksgiving holiday piece
c. as a sympathy/funeral arrangement d. as a standing spray

Example Chemical Problem Solving

1. Calculate the area so you know how many cubic feet you would need to spray in the greenhouse roof area.



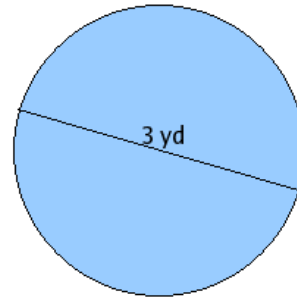
- a. 175 cubic feet
 - b. 37,500 cubic feet
 - c. 45,250 cubic feet
 - d. 75,000 cubic feet
2. You want to apply 5 pounds active ingredient (a.i.) per acre. Your formulation is 70 pounds percent wettable powder (WP). How much formulation do you need per acre?
- a. .14 pounds
 - b. 3.5 pounds
 - c. 5.34 pounds
 - d. 7.14 pounds
3. How many cubic feet does the greenhouse have so you can calculate how much area to cover for your greenhouse pesticides?



- a. 198 cubic feet
 - b. 58,125 cubic feet
 - c. 86,250 cubic feet
 - d. 450,000 cubic feet
4. Your sprayer holds 3 gallons of mix. The pesticide you are spraying instructs you to mix 2 tablespoons of active ingredient for every quart of water. How much active ingredient should you add to the tank to make a full tank load?
- a. 2 tablespoons
 - b. 6 tablespoons

- c. 12 tablespoons
 - d. 24 tablespoons
5. The label lists the application rate as 2 pounds formulation per 100 gallons of water for dilute application. Your sprayer tank holds 50 gallons. How many pounds of formulation should you add for a full tank load?
- a. 0.5 pounds
 - b. 1 pound
 - c. 2 pounds
 - d. 25 pounds

6. What is the area of the circle to the right?
- a. 7.1 square feet
 - b. 28.3 square feet
 - c. 63.6 square feet
 - d. 95.4 square feet



7. What is the volume of the greenhouse to the right if the width is 18 feet and the length is 30 feet?
- a. 254 cubic feet
 - b. 540 cubic feet
 - c. 3,815 cubic feet
 - d. 7,630 cubic feet

