Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

**Show All Work**

\[
\frac{6 \times 3}{24} \times \frac{2}{24}
\]

\[
\frac{6}{8}
\]

Answer $32

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

**Show All Work**

\[
\frac{6 \times 2}{24}
\]

Answer 12 quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs. What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

Answer 48 8-ounce bottles

Content - 3 pts
The response indicates a thorough understanding of the mathematical concepts embodied in the task by setting up valid processes for all three parts. Part A establishes 6 gallons equates to 24 quarts, Part B shows the division of 24 quarts into 2 tubs, and Part C shows the conversion of 12 quarts to 384 ounces.

Process - 3 pts
The response indicates a thorough understanding of the mathematical processes related to the task by showing correct calculations and answers of 32 in Part A, 12 in Part B, and 48 in Part C.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

Show All Work

\[ 8 \text{ containers} = 24 \text{ qt} \]
\[ 8 \times 4 = 32 \]

\[ 6 \text{ gal} = 24 \text{ qt} \]

\[ 6 \times 4 = 24 \text{ quarts} \]

Answer $32

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

\[ 24 \]
\[ 2 \]

\[ \frac{12}{2} \]

Answer \[ 12 \] quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

\[
\begin{align*}
12 & \div 4 \\
\hline \\
48 & \\
\end{align*}
\]

Answer 48 8-ounce bottles

**Content - 3 pts** The response indicates a thorough understanding of the mathematical concepts embodied in the task by setting up valid processes for all three parts. Part A establishes 6 gallons equates to 24 quarts, Part B shows the division of 24 quarts into 2 tubs, and in Part C, the number of bottles per quart (4) is found and because there are 12 quarts per tub, 12 is multiplied by 4.

**Process - 3 pts** The response indicates a thorough understanding of the mathematical processes related to the task by showing correct calculations and answers of 32 in Part A, 12 in Part B, and 48 in Part C.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

Show All Work

\[
\begin{align*}
1 \text{ gallon} &= 4 \text{ quarts} \\
6 \text{ gallons} &= 6 \times 4 = 24 \text{ quarts}
\end{align*}
\]

Answer $32$

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

\[
\begin{align*}
6 \text{ gallons} &= 24 \text{ quarts} \\
\frac{24}{2} &= 12 \text{ quarts}
\end{align*}
\]

Answer 12 quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

\[
\begin{array}{c}
12a \\
\times 12 \\
\hline
32 \\
320 \\
\hline
3840
\end{array}
\]

Answer 48 8-ounce bottles

Content - 3 pts The response indicates a thorough understanding of the mathematical concepts embodied in the task by setting up valid processes for all three parts. Part A establishes 6 gallons equates to 24 quarts in the drawings, Part B shows the division of 24 quarts into 2 tubs, and Part C shows the conversion of 12 quarts to 384 ounces.

Process - 2 pts The response indicates a partial understanding of the mathematical processes related to the task by showing correct answers of 32 in Part A and 48 in Part C. The answer of 24 is incorrect for Part B.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

Show All Work

\[
\begin{array}{c}
4 \\
4 \\
4 \\
4 \\
\hline
24
\end{array}
\]

Answer $ 24.00

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

\[
\begin{array}{c}
2 \div 12 \\
2 \div 4 \\
8 \div 4 \\
4 \div 0 \\
\hline
12
\end{array}
\]

Answer 12 quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

\[
\begin{array}{c}
12 \\
\hline
4 \\
\hline
48
\end{array}
\]

Answer \[48\] 8-ounce bottles

**Content - 3 pts** The response indicates a thorough understanding of the mathematical concepts embodied in the task by setting up valid processes for all three parts. Part A establishes 6 gallons equates to 24 quarts, Part B shows the division of 6 gallons equally into two tubs and then equates the 3 gallons in 1 tub to 12 quarts and Part C shows a valid set-up where the number of bottles per quart (4) is found and because there are 12 quarts per tub, 12 is multiplied by 4.

**Process - 2 pts** The response indicates a partial understanding of the mathematical processes related to the task by showing correct answers of 12 in Part B and 48 in Part C. The answer of 24.00 is incorrect for Part A.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

\[
\frac{3}{12} + \frac{3}{4} = \frac{3}{3} = 1
\]

\[
\frac{4 \times 8}{32} = 32 \text{ dollars}
\]

Answer $32.00

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

\[
\frac{6 \text{ gallons}}{2} = 3 \text{ gallons}
\]

Answer 12 quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs. What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

\[
\begin{array}{c}
81384 \\
3242 \\
6718 \\
144 \\
-88 \\
-56 \\
-20 \\
-13 \\
-8 \\
-56 \\
-28 \\
-14 \\
-8 \\
-56
\end{array}
\]

Answer 48 8-ounce bottles

Content - 2 pts The response indicates a partial understanding of the mathematical concepts embodied in the task by setting up valid processes in Part B and Part C. Part B divides the number of quarts per gallon equally into two tubs and in Part C, the number of bottles per quart is found (32÷8=4) and because there are 12 quarts per tub, shows 4 added 12 times. Part A is does not establish that 6 gallons equates to 24 quarts.

Process - 3 pts The response indicates a thorough understanding of the mathematical processes related to the task by showing correct calculations and answers of 32 in Part A, 12 in Part B, and 48 in Part C.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

\[
\text{1 gallon} = 4 \text{ quarts}
\]

\[
\frac{6 \times 4}{24} \approx 2.4 \text{ gallons}
\]

\[
\frac{8 \times 3}{24} = 1 \text{ gallon}
\]

Show All Work

Answer $32$

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

Answer \(\frac{4}{2} = 2\) quarts
**Part C**

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.

What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

\[
\begin{array}{c}
\frac{32}{4} \\
\hline
\frac{128 \text{ ounces}}{128}
\end{array}
\]

Answer: 16 bottles

**Content - 2 pts** The response indicates a partial understanding of the mathematical concepts embodied in the task. Part A establishes 6 gallons equates to 24 quarts and Part C shows a valid set-up based on the answer given in Part B. A valid set-up is not shown in Part B.

**Process - 3 pts** The response indicates a partial understanding of the mathematical processes related to the task by showing a correct answer of 32 in Part A and in Part C, the answer of 16 is correct based on the incorrect answer given in Part B. The answer of 4 is incorrect for Part B.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

**Show All Work**

\[ 6 \times 4 = 24 \]

Answer $ 24$

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

**Show All Work**

\[ \frac{12}{2} = 6 \]

Answer \[ \frac{12}{2} \] quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

Answer \( \frac{256}{32} \) 8-ounce bottles

Content - 2 pts The response indicates a partial understanding of the mathematical concepts embodied in the task by setting up valid processes in Part A and Part B. Part C shows an invalid set-up.

Process - 1 pt The response indicates a limited understanding of the mathematical processes related to the task by showing only the correct calculations and answer of 12 in Part B. The answers for Parts A and C are incorrect.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**
What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

**Show All Work**

123456

Answer $ \underline{8} \text{ gallons}$

**Part B**
Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

**Show All Work**

$3 - 6 \Rightarrow 3$

Answer \underline{3} \text{ quarts}
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

Answer 9 8-ounce bottles

**Content - 1 pt**  The response indicates a limited understanding of the mathematical concepts embodied in the task by setting up a valid process for Part C only as it is based on using the incorrect answer of 3 quarts from Part B. Parts A and B show invalid set-ups.

**Process - 0 pts**  The response indicates no understanding of the mathematical processes related to the task. The answers for Parts A, B, and C are incorrect.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

**Part A**

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

6 gallons = 2 \text{ quart} \\
3.6 = 2 \text{ quart}

**Show All Work**

Answer $8$

**Part B**

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

**Show All Work**

Answer \_10\_ quarts
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs.
What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

Answer ____________ 8-ounce bottles

Content - 0 pts  The response indicates no understanding of the mathematical concepts embodied in the task. Parts A and B do not show the set-up of valid processes. Part C is blank.

Process - 0 pts  The response indicates no understanding of the mathematical processes related to the task. The answers for Parts A, B, and C are incorrect.
Abby needs 6 gallons of bubble mix for a party. The bubble mix is sold in 3-quart containers. Each container costs $4.

Part A

What is the total cost of the bubble mix Abby needs to buy?

1 gallon = 4 quarts

Show All Work

\[
\begin{align*}
\text{2. } & \text{1 gallon = 4 quarts} \\
\text{3. } & \text{1 gallon = 6 quarts}
\end{align*}
\]

Answer $6 \text{ quarts}$

Part B

Abby buys 6 gallons of bubble mix and pours it equally into 2 tubs. How many QUARTS of bubble mix does Abby pour into each tub?

Show All Work

\[
\begin{align*}
&\text{\_ \_ \_ \_ \_ \_ \_} \\
\text{Answer} & \text{ three quarts}
\end{align*}
\]
Part C

Abby fills 8-ounce bottles with the bubble mix from 1 of the tubs. What is the GREATEST number of 8-ounce bottles that can be filled with bubble mix from 1 of the tubs?

1 quart = 32 ounces

Show All Work

\[
\begin{align*}
\frac{9}{14} + \frac{3}{14} &= \frac{12}{14} \\
&= \frac{6}{7}
\end{align*}
\]

Answer _______________ 8-ounce bottles

**Content - 0 pts** The response indicates no understanding of the mathematical concepts embodied in the task. None of the three parts show the set-up of valid processes.

**Process - 0 pts** The response indicates no understanding of the mathematical processes related to the task. The answers for Parts A, B, and C are incorrect.