Name _____

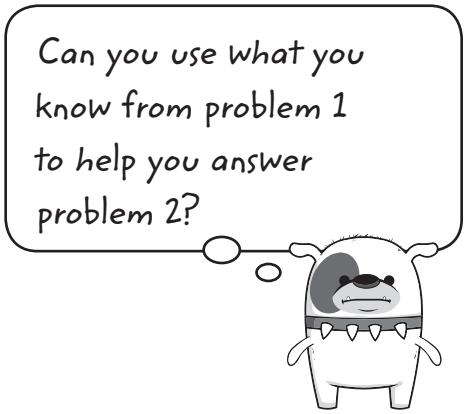
Favorite Photos

Your Challenge

Answer the questions below and show your thinking on the **Recording Sheet**.

1. You have two photo albums with your favorite photos. One album has 124 pages with 4 photos on each page. The other album has 162 pages with 3 photos on each page. How many photos are in each album?

2. You decide to buy a new photo album to fit at least 520 photos. You can buy an album that holds 3 photos per page or an album that holds 4 photos per page. Which type of album will you choose? What is the least number of pages you will need for the album?



Favorite Photos

1. Album 1: 496 pages; $124 \times 4 = 496$

Album 2: 486 pages; $162 \times 3 = 486$

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2. Answers will vary. Possible solutions shown.

4 photos per page:
From problem 1, you know that $124 \times 4 = 496$.
$496 + (6 \times 4) = 520$ and $124 + 6 = 130$
So, you will need at least 130 pages.

3 photos per page:
From problem 1, you know that $162 \times 3 = 486$.
$486 + (12 \times 3) = 522$ and $162 + 12 = 174$
So, you will need at least 174 pages.

Name _____

Display of Cans

Your Challenge

1. You see a shopping cart bump into a display of cans stacked in an array. Many of the cans fall onto the floor. You can tell by the cans that are still in place that they were stacked in at least 10 rows with at least 20 cans in each row. The grocery clerk says that there were 300 cans in the display. Write three different equations on the **Recording Sheet** to show how the cans could have been on display.

2. Make your own display for between 550 and 600 cans using the following rules:

- There must be at least 15 rows of cans.
- There must be at least 15 cans per row.
- No row can have a number of cans that is a multiple of 10.
- At least 13 rows must have the same number of cans.
- At least one row must have three times as many cans as another row.

How many cans will go in each row? How many cans are in your display? Sketch your display and show your thinking using multiplication equations on the **Recording Sheet**.

Display of Cans

1. Possible equations are $10 \times 30 = 300$, $12 \times 25 = 300$, and $15 \times 20 = 300$.

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2. Drawings and equations will vary. Possible solution:

$13 \times 21 = 273$

$5 \times 63 = 315$

$315 + 273 = 588$

13 rows of 21 cans and 5 rows of 63 cans

588 cans in the display