## Extra Practice

1) If you have a $12 \times 14$ image, can you resize it to $5 \times 7$ without distortion?
2) You have an $3 \times 5$ image. Name 3 other sets of dimensions you can resize this image to without distorting the image.
3) You have a rectangular image with dimensions of $2 \times 3$, and you have a $12 \times 12$ piece of photo paper on which to print your image. You want to make the image as large as possible. What will your new dimensions after resizing be?

If you have a $12 \times 14$ image, can you resize it to $5 \times 7$ without distortion?
Is this proportional?

Set up
proportion:

$$
\frac{12}{14}=\frac{5}{7}
$$

Solve:

$$
\begin{aligned}
12 \times 7 & =14 \times 5 \\
84 & =70
\end{aligned}
$$

It is not proportional, so there will be distortion

You have an $3 \times 5$ image. Name 3 other sets of dimensions you can resize this image to without distorting the image. (hint: think of equivalent fractions)

Examples: 6x10, 9x15, 12x20

You have a rectangular image with dimensions of $2 \times 3$, and you have a $12 \times 12$ piece of photo paper on which to print your image. You want to make the image as large as possible. What will your new dimensions after resizing be?

Write a proportion:

Solve:

$$
\begin{aligned}
\frac{2}{3} & =\frac{h}{12} \\
2 \times 12 & =3 \times h \\
24 & =3 h \\
8 & =h
\end{aligned}
$$

The largest image would be $8 \times 12$

