IMAGE EDITING 101 - MAKING BASIC ADJUSTMENTS

DIGITAL CONTENT CREATION > 3.2 INTEGRATING AND RE-ELABORATING DIGITAL CONTENT

TARGET GROUP	AGE GROUP	PROFICIENCY LEVEL	FORMAT	COPYRIGHT	LANGUAGE
Facilitators	N/A	Level 2	Background information	Protected by United States and international copyright and trademark laws	English

This resource contains simple steps to crop, resize and rotate images.

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General Objective	Skillset building
Preparation time for facilitator	less than 1 hour
Competence area	3 - Digital content creation
Name of author	GCFGlobal.org
Resource originally created in	English

WORKSHOP DIRECTIONS

1 Introduction

Image editing is all about adjusting your images to make them look better. We'll cover some of the most **basic image adjustments**, along with some common problems to watch out for when making these changes. The adjustments we'll cover in this lesson include:

- **Cropping**: If you want to remove parts of an image, you can **crop** it. You can think of cropping as using a pair of scissors to **cut out** the parts you no longer want.
- **Resizing**: If you want to make an image smaller or larger, you can **resize** it. However, keep in mind that making an image larger than its original size generally does not make the image look good.
- **Rotating**: If you want to change the **orientation** of an image, you can **rotate** it to the left or right.

If you'd like to follow along, you can download some or all of our **example images**. Just click any of the images below to open a full-sized version, then right-click the full-sized version and select **Save Image**

2 About this lesson

Throughout this lesson, we'll show you how to make these adjustments with Pixlr X, a **free web-based image editor** you can use from almost any computer with an Internet connection. If you're using a mobile device, you can use the free Pixlr mobile app.

If you have a different image editing program, you can still follow along. These features will work **roughly the same way** for most image editors.
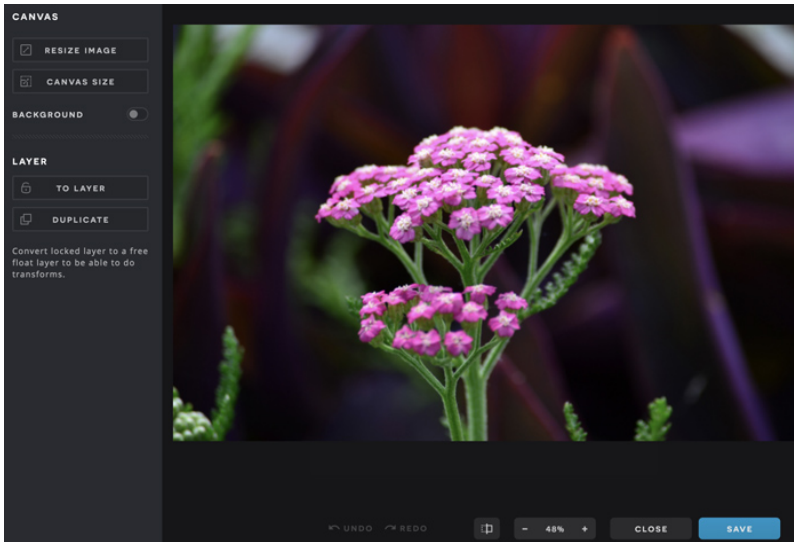
3   Image editing tips

Here are a few important things to keep in mind as you start working with images.

- **Keep your originals**: If you're planning to make even basic changes to an image, you should also keep an **original unedited version** of the file. We recommend making a habit of doing this whenever you're working with image files. This way, you'll always be able to go back to the original version.
- **Check the zoom level**: When you're editing an image on a computer, you'll usually be viewing it at **less than 100% of its full size**. This is because most modern digital cameras take large high-resolution images. These images are so large, in fact, that most computer screens can't display all of the pixels in the image at once. This is actually a good thing because it means you'll have **extra detail** to work with as you edit the image.
- **Higher resolution = more detail**: Whenever you crop or resize an image, you're also **removing pixels** from the image. This means you'll have **fewer pixels to work with**, which will give you less flexibility. If you want to **print** a photo, having extra pixels will help to make the photo look as sharp as possible because photo prints have a higher resolution than most computer screens. If you're creating a **desktop background**, you'll want to ensure that the final size is at least as large as your screen resolution.
- **Experiment**: There's no perfect formula for editing images. As long as you keep a copy of the original file, you should feel free to **try out different adjustments** to find what works for that

image. If you change your mind later on, you can always go back to the original version and start over.

4 Cropping images

There will often be times when an image includes a lot of extra space or content you'd like to remove. You can solve this problem by **cropping the image**. In the example below, we cropped the image to show less of the background and emphasize the butterfly.
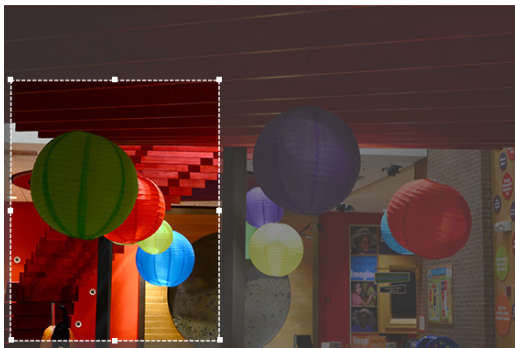
Original image   Cropped image

You can also use cropping to completely change the **composition** or **subject** of an image. In the example below, we focused in on just one part of the image—the lanterns on the left—and cropped out everything else. You may have also noticed that by cropping this way, we changed the image's orientation from landscape to portrait.

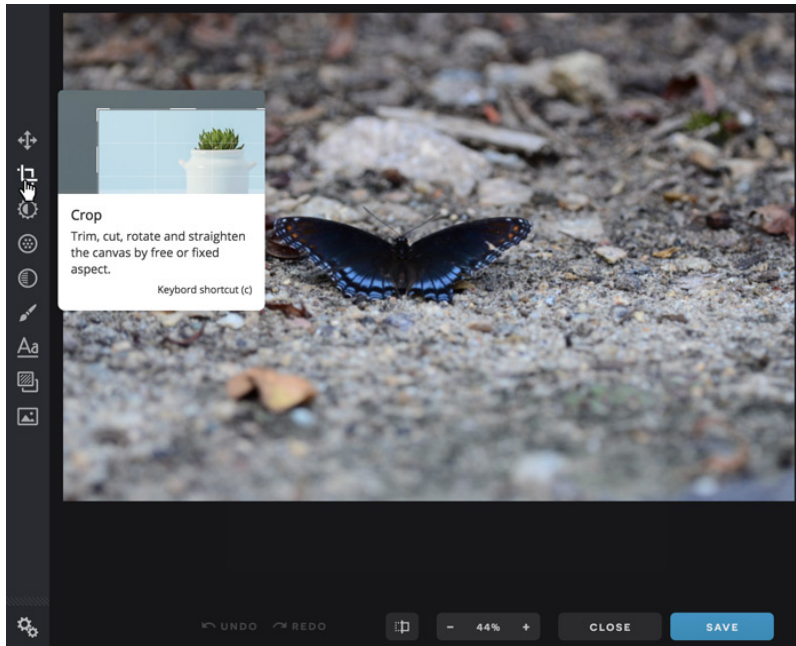Original image   Cropped image

5 To crop an image:

Remember, we'll be using Pixlr X throughout this lesson, so this process may vary depending on the software you're using.

1. Go to Pixlr X in your web browser, then click **Browse** to open the image from your computer.

2. Click the **Crop button.**

3. Click and drag the **cropping handles** until only the part of the image you want to keep remains visible. You can choose one of the predefined aspect ratios—for example, 4:3 or 3:2—by clicking **Select Aspect** at the bottom of the menu.
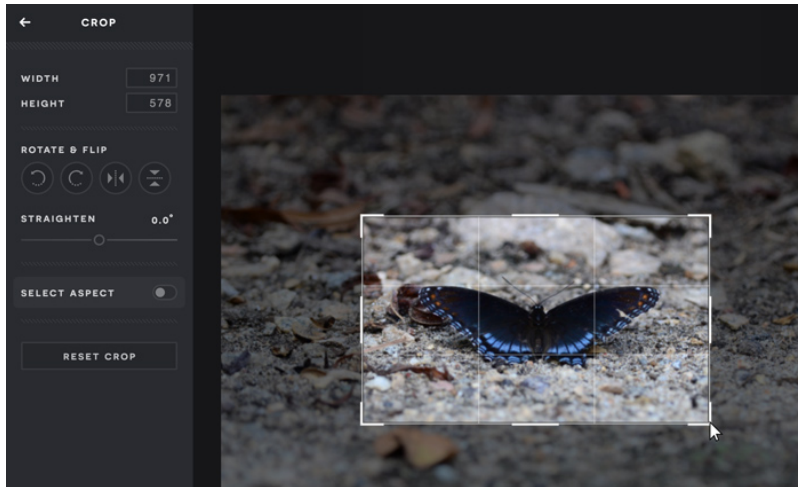
4. Close the **Crop menu** to confirm your selection, and your image will be **cropped.**
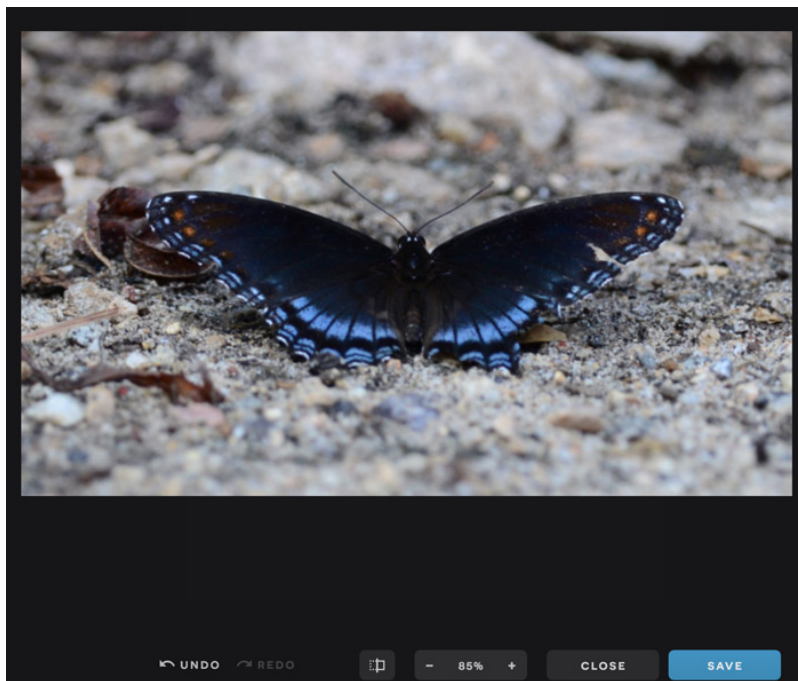
5. If you like the results, click the **Save** button to keep this new version of the image.

In some applications like Microsoft Paint, you may need to **select** the part of the image you want to keep before clicking **Crop**.

In the example above, locate the **zoom level** at the bottom of the screen. You'll see that in step 2 we

were viewing the image at **44%** of its actual size, and in step 4 we zoomed in to **85%**. This is because our image has a high resolution, which allows us to zoom in (up to **100%**) without losing detail. High-resolution images will give you **more flexibility** to crop and resize the image without reducing its quality.

Remember, cropping will **remove pixels** from an image, so you'll always need to make sure the cropped version is still large enough for your needs. If you want to **print** the image or display it at a **large size**, you'll generally need more resolution.

6   Resizing images

Because digital images can be displayed at different sizes, you probably won't need to resize your images most of the time. However, resizing is an easy way to **reduce the file size** of an image, which can be helpful if you want to send an image as an **email attachment** or **upload it**. You can see an example of resizing below.
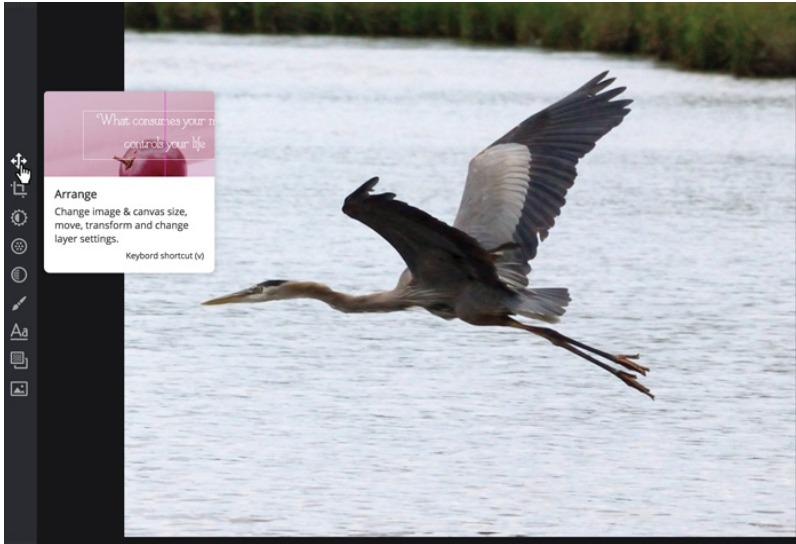

Remember, you should **avoid making images larger** than their original size. When you do this, the image simply won't have enough detail to look good at the larger size. As you can see in the example below, the resized image is **blurry** and doesn't have a lot of detail.
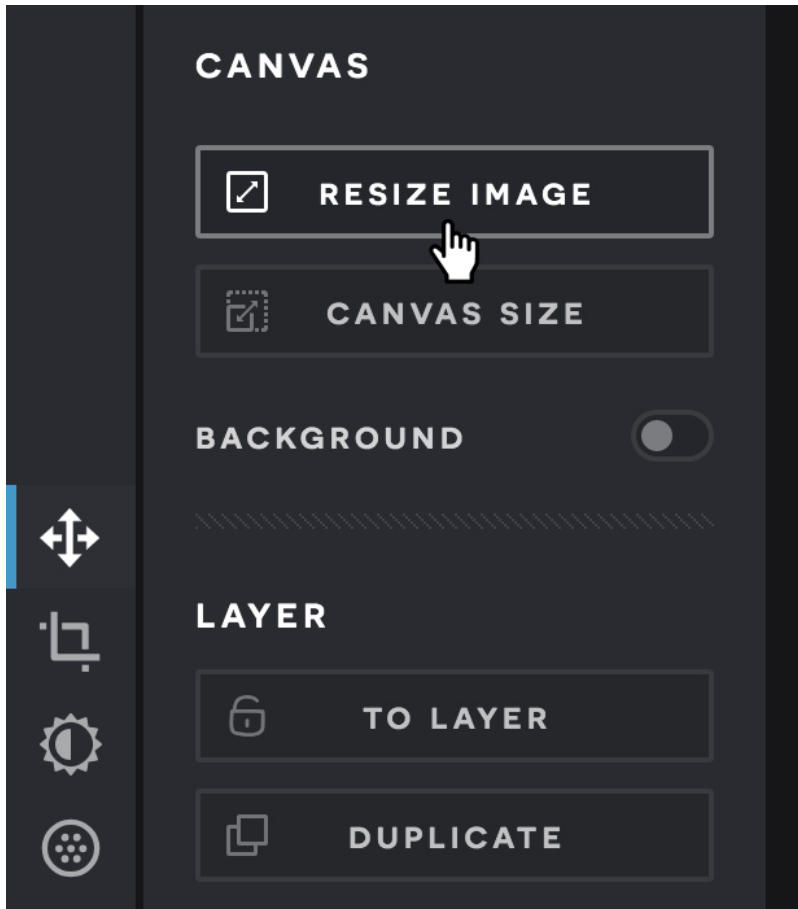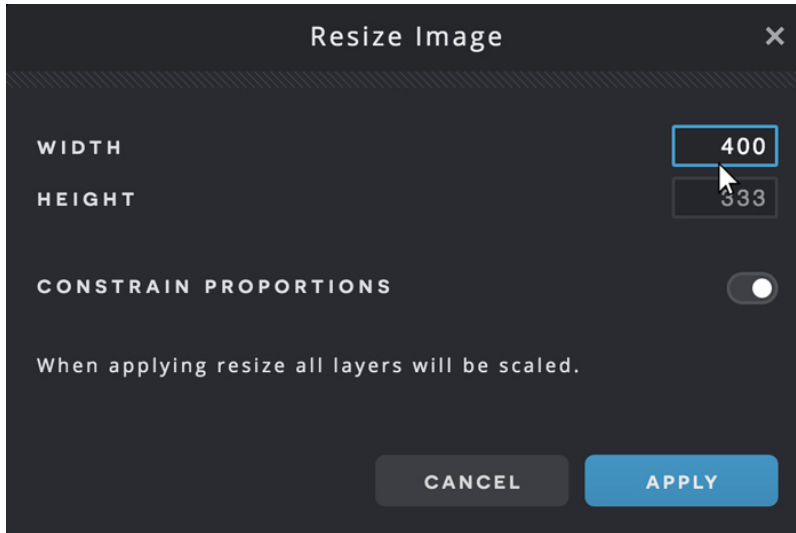
7   To resize an image:

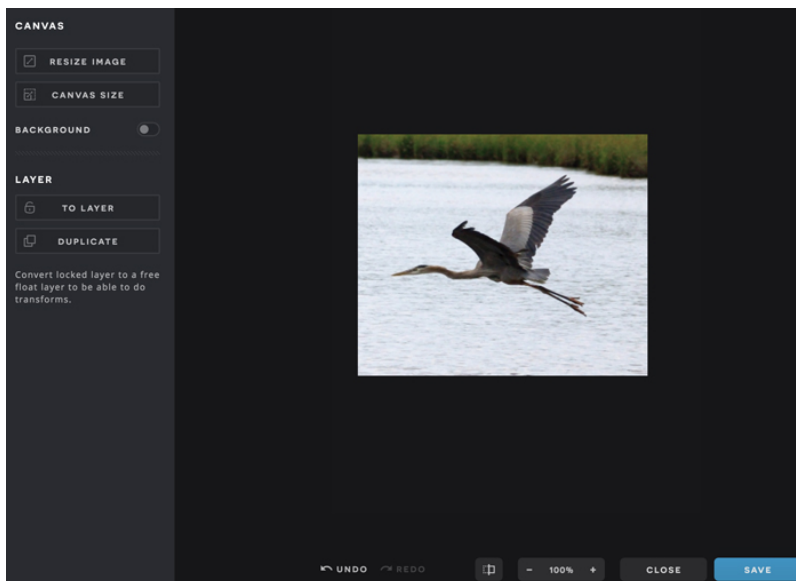1. With the image open in Pixlr X, click the **Arrange** button.

2. Click the **Resize Image** button.

3. Enter the desired **dimensions** for the new image. When you enter the new image width, the height will be adjusted **automatically** to maintain the original **aspect ratio** of the image (we'll discuss this point in more detail below).

4. Click **Apply**. The image will be **resized**.

5. If you're happy with the results, click the **Save** button to keep this new version of the image.

Some programs like Microsoft PowerPoint require you to click and drag **sizing handles** until the image is the desired size. You can review this lesson on inserting pictures from our PowerPoint tutorial to learn more.

8 Preserving aspect ratio when resizing

When resizing an image, it's important to make sure the new version uses the same **proportions**, or **aspect ratio**, as the original. For example, take a look at this image.

If you want to resize it while maintaining the same aspect ratio, you'll need to change **both the height and width** by equal proportions. Most image editing programs can do this automatically when you resize an image. However, if you simply try to guess which proportions to use, or if you're using **sizing handles**, it's easy for an image to become **distorted**. A distorted image may look **too wide** or **too narrow**, as in the examples below.

Too narrow   Too wide

While it may not always be this obvious, these examples illustrate why it's so important to preserve the

original aspect ratio when resizing an image. There are a few easy ways to make sure a resized image will use the same aspect ratio as the original:

- Most applications will give you the option to preserve the aspect ratio when resizing. In **Pixlr X**, this option is called **Constrain Proportions**, but in other applications it may be called **Keep Proportions** or **Maintain Aspect Ratio**. In some programs, like Photoshop, it is represented by a **lock icon**. Make sure this option is **turned on** before resizing an image. From here, you should only need to adjust the height or the width; the other dimension will be adjusted **automatically**.
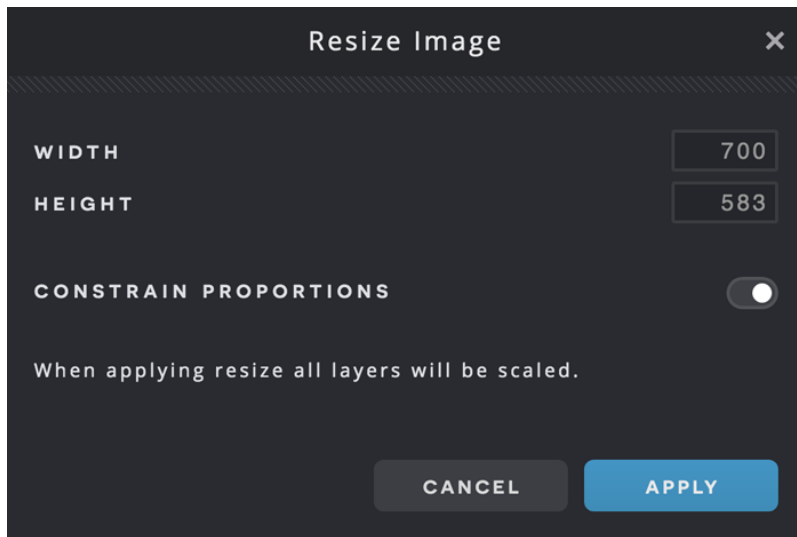
- If you're using **sizing handles** to resize an image, be sure to use a **corner sizing handle** rather than a side handle. Some applications also require you to press and hold a key on your keyboard, like **Shift** or **Alt**, to lock the aspect ratio when using sizing handles.
- If you need to fit an image to a **new aspect ratio**—for example, if you need to print a 4×6 version of a square image—it's best to **crop the image to the new aspect ratio**. Simply resizing the image to match the new aspect ratio will result in image distortion.
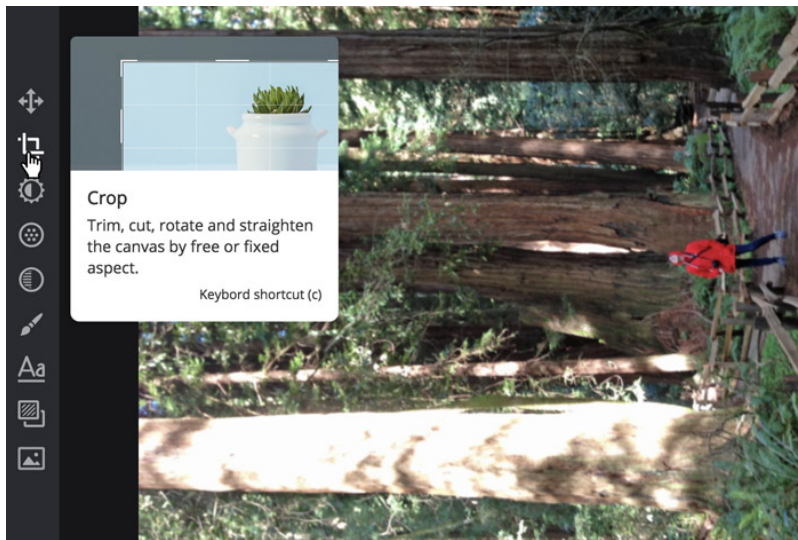
9　Rotating images

Sometimes an image may be rotated the wrong way. This can happen if the camera was turned on its side when taking the original image. It's easy to fix this by **rotating the image**, as in the example

below.

Original image   Rotated image

10 To rotate an image:

1. With the image open in Pixlr X, click the **Crop** button.

2. Choose the desired **rotation direction**. In our example, we'll rotate the image **to the right**. You can also use the **Straighten** tool if you need finer control over the rotation.

WIDTH   1440
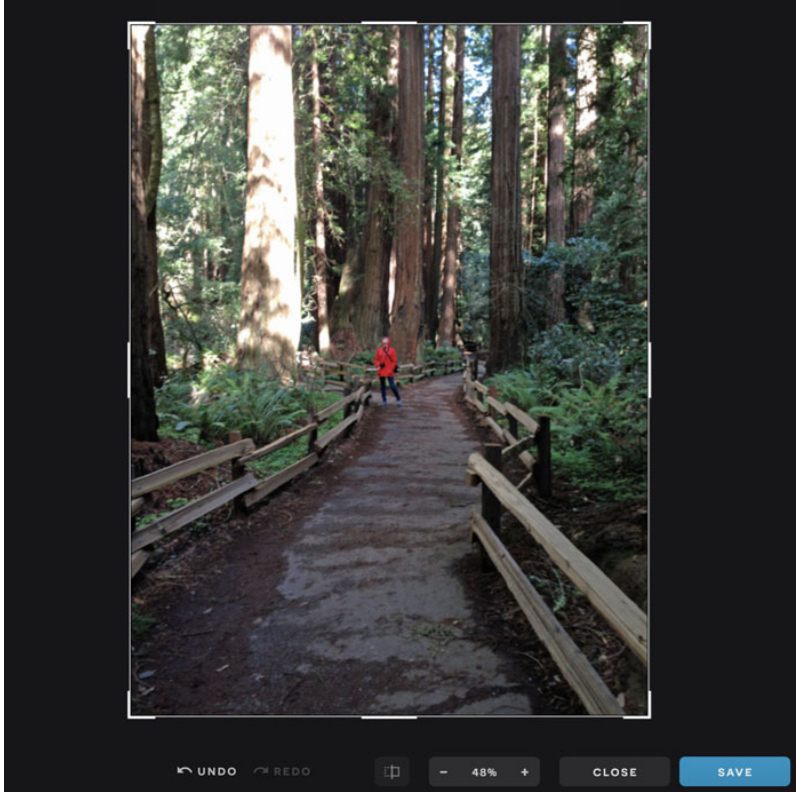
HEIGHT   1920

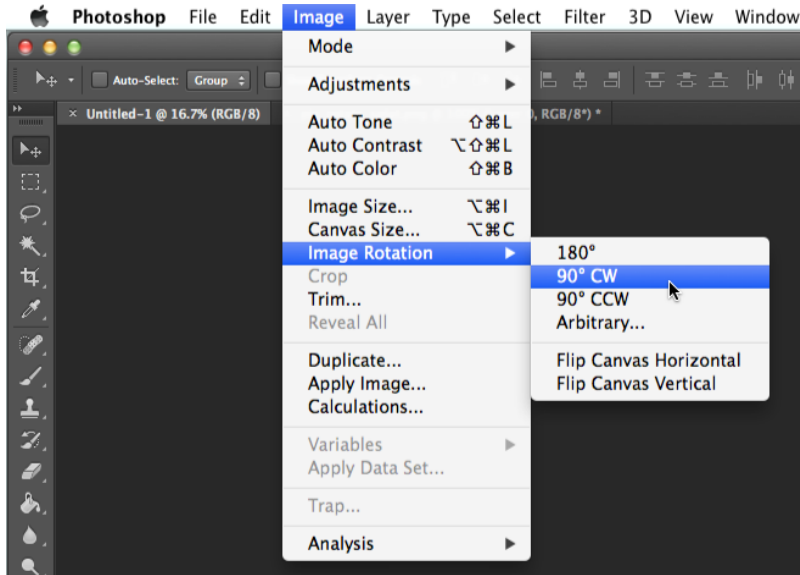ROTATE & FLIP

STRAIGHTEN   0.0°

SELECT ASPECT

RESET CROP

3. If you're happy with how the image rotated, click the **Save** button to keep this new version of the image.

In some programs, the **Rotate** tool will be a menu option. In Photoshop, for example, it can be found by clicking the **Image** menu, then selecting **Image Rotation**.

11   Other image adjustments

So far, we've covered some of the most basic image adjustments, like cropping, resizing, and rotating. In the next lesson, we'll cover other common adjustments you can use to improve your images, like **brightness and contrast**, **saturation**, and **sharpening**.

12   Challenge!

If you want to practice making the adjustments we cover in this lesson, you can download some or all of our **example images**. Just click any of the images below to open a full-sized version, then right-click the full-sized version and select **Save Image As** to save it to your computer.

1. **Open an image** in an image editing application (like Pixlr X).
2. Use the **crop** tool to remove parts of an image. Try experimenting to see how different types of crops affect the image.
3. Try **resizing** an image to be **smaller** than its original size. You can turn **Constrain Proportions** on and off to see how this affects the **aspect ratio**.
4. Try resizing an image to be **larger** than its original size. Notice how the image suffers a loss in quality and detail.
5. Use the **rotate** tool to rotate an image.
6. Save a copy of the edited image. You'll want to choose a **new file name** to avoid accidentally overwriting the original version.