

One of the more common things I come across in the photo lab is people scoffing when they hear our prices and then claiming they can print whatever they want cheaper at home. I never really bother arguing with them because I know from my personal experience that they are wrong.

Modern Inkjet printers have progressed a long way in the past few years, but the commercial printers available in your local supermarket are still not a match for the minilab traditional Silver printing process. However professional inkjet systems are of a better quality of print and the lifetime of the prints is usually as good as traditional Silver printing, if not better (<http://www.wilhelm-research.com/>), but the downside is these systems can run into thousands of pounds.

Traditional Silver printing has been shown to last in excess of 100 years however most inkjet prints will tend to fade after 5 years or so, and even quicker if left in a sunny place such as in a frame on a wall. One way to increase the lifetime of inkjet prints in your commercial printer is to use the manufacturer inks as opposed to the cheaper refilled cartridges as these tend to print less pages and fail to work more often than manufacturer inks. (<http://www.hp.com/sbso/product/supplies/printer-ink-refill.html>)

So one day whilst bored at work I decided to work out how much it would actually cost per print to print your images at home and then compare this to the cost of printing prints at the supermarket minilab I work at. The Prices used in this were taken straight from the shelves on the 19th of November this year and for comparison the prices in the minilab at the time were:

6x4"	1 hour	24 hour
1-49 Prints	£0.18 Per Print	£0.15 Per Print
51-99 Prints	£0.14 Per Print	£0.10 Per Print
100-149 Prints	£0.12 Per Print	£0.07 Per Print
150+ Prints	N/A	£0.05 Per Print

I decided to compare the prices of two different types of printers, a good quality photo printer, which would produce a decent quality print and would be a relatively common level of printer for people to use to print their images photos on at home, as well as a cheap and nasty version, choosing the cheapest printer on the shelf and calculating the costs for that as well. Both using the Manufacturer cartridges to get the best possible prints from each printer.

For both the methods I used an assumption, from my personal experience of printing inkjet prints, of 100 prints from a full set of cartridges before the first cartridge(s) need replacing. As a lot of the time more than one cartridge will run out within a short space of time and more often than not most if not all will need replacing soon after the first one requires replacing.

However I also found on the Canon website a .pdf document with their recorded average page yield using an international standard for measuring page yield, including an estimated yield for the black cartridges. So I recalculated the costs again using the Canon figures to see the difference they made.

Good Quality Photo Printing

Canon iP4500 Inkjet Printer £79.97

Magenta Ink Cartridge £10.79

Cyan Ink Cartridge £11.09

Black Ink Cartridge £9.76 / £13.49

Yellow Ink Cartridge £9.79

Average Cost of Ink Cartridge £10.98

Total Cost of Ink £52.41

50 Sheets of 6x4 Inkjet paper

Kodak Premium £12.97 on a Buy One Get One Free (BOGOF) offer

Fujifilm £5.97

Total Cost of Paper £12.97

Total cost of Printing* £65.38

Cost of Printing without BOGOF £78.35

Cost Per Print with BOGOF £0.65

Cost Per Print without BOGOF £0.78

Normally over **11** times more expensive than commercial minilab printing based on 24 hour processing service (£0.07 per print). However with the BOGOF Offer this is reduced to over **9** times more expensive.

*Using assumption from experience of a Maximum of 100 6x4 prints from one set of cartridges.

Cheap and Nasty Photo Printing

Epson S20 printer £39.97

Single Black Inkjet Cartridge £5.97

Multi Pack Colour Cartridges (3 in pack) £18.99

Cost of Ink £24.96

Own Brand Value Paper 6x4 75 Sheets £3.47

Cost of Paper £4.62

Total Cost of Printing** £29.58

Cost Per Print £0.29

Equivalent to instore Instant Printing. But still more than **3** times more expensive than commercial minilab printing based on 24 hour processing service (£0.07 per print).

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Average Cost of Ink Cartridge £10.98

Total Cost of Ink £52.41

50 Sheets of 6x4 Inkjet paper

Kodak Premium £12.97 (BOGOF)

Fujifilm £5.97

Total Cost of Paper £51.88

Total cost of Printing*** £104.29

Cost of Printing without BOGOF £143.20

Cost Per Print with BOGOF £0.30

Cost Per Print without BOGOF £0.41

With BOGOF Price Per Print is **6** times more expensive than commercial minilab printing based on 24 hour processing service (£0.05 per print).

Without BOGOF Price Per Print is more than **8** times more expensive than commercial minilab printing based on 24 hour processing service (£0.05 per print).

*** Using Canon Page Yield estimates approx 350 6x4 prints from a full set of cartridges

Cartridge	Average Yield of Prints
CLI-8C Cyan	420
CLI-8M Magenta	307
CLI-8Y Yellow	327

Above Table is from (http://www.canon.co.uk/Images/pixma_pageyields_UK_tcm14-574874.pdf)

Average number of prints from the above cartridges is 351.33, I have used 350 for simplicity as the 6x4 paper is sold in packs of 50.