

Assume:

- Human time \$500/8-hour day (for simplicity making the generally unreasonable assumption that this is equivalent across all human activities below)
- 32GB flash drive \$4 (couple of years ago: 16GB flash drive \$8)
- 5 letters per word; 500 words per page

1. Author writes a 200 page book in one year (200 working days) – cost for human time to write?
2. Prints book in volume at \$1 a copy. Cost per book (human+print) if sell:

copies sell	1	10,000	1 million
cost per book			

3. Book sells for \$10 a copy
 - (a) What value did the author’s story add to the book?
(You may assume the book is worth \$10 to people who buy it, and any book would be worth the printing cost.)
 - (b) Assuming author gets \$2 for each book, how many copies must be sold for the author to break even? (vs. author does work-for hire for that year)
4. Photocopy book at \$0.05/page – cost to reproduce book (ignore human time for this)?
5. Scan book (sheet-feed scanner, 10 pages/minute) – human time cost to make scan?
6. Assume can copy to flash drive in 10 seconds – human time cost to make copy?
7. Book represented in 0.5 MB; material cost for data storage (assume only charge for the portion it uses)?
8. What else has similar characteristics? Complete blanks in table:

Digital Intellectual Property	Physical IP Renderer
Novel	eReader
Song (MP3)	MP3 Player
JPEG Photo	
	Video Player
Video Game	
	Arduino or Personal Computer
Verilog digital circuit	
STL (stereolithography) CAD (AutoCAD, Blender)	
DNA Sequence	DNA Printer