## The Harry Potter Shopping List Puzzle

When Harry visits Gringotts for the first time, he realizes that he has mounds of Galleons, columns of Sickles and heaps of Knuts. Hagrid shovels a couple of handfuls into a pouch for Harry, and they go off to buy his school supplies. Harry starts the shopping trip with 30 gold Galleons, 45 silver Sickles and 67 bronze Knuts.

- 1 Galleon = \$8.43 CAD
- 1 Galleon = 17 Sickles
- 1 Sickle = 29 Knuts

Harry buys the following in Diagon Alley:

## Clothes:

•	3 sets of black work robes	9 Galleons, 10 Sickles
•	One plain black pointed hat	7 Galleons, 12 Sickles, 5 Knuts
•	One pair protective gloves	2 Galleons, 8 Sickles, 4 Knuts
•	One winter cloak	8 Galleons, 13 Sickles, 9 Knuts

## Textbooks:

•	The Standard Book of Spells grade 1by Miranda Goshawk	15 Sickles, 7 Knuts
•	A History of Magic by Bathilda Bagshot	3 Galleons, 12 Sickles
•	Magical Theory by Adalbert Waffling	1 Galleon, 25 Knuts
•	A Beginner's Guide to Transfiguration by Emeric Switch	2 Galleons, 13 Sickles, 5
	Knuts	
•	One Thousand Magical Herbs and Fungi by Phillyda Spore	16 Sickles, 17 Knuts
•	Magical Drafts and Potions by Arsenius Jigger	1 Galleon, 5 Sickles, 2
	Knuts	

- Fantastic Beasts and Where to Find Them by Newt Scamander 12 Sickles
- The Dark Forces: A Guide to Self Protection by Quentin Trimble3 Galleons, 8 Knuts Other Equipment:

• 1 wand	12 Galleons
<ul> <li>1 cauldron (brass or pewter)</li> </ul>	10 Galleons, 7 Sickles, 15
Knuts	
<ul> <li>1 set of glass or crystal phials</li> </ul>	15 Sickles
• 1 telescope	10 Galleons
<ul> <li>1 set of brass scales</li> </ul>	12 Sickles, 25 Knuts

How much money did Harry spend in Canadian Dollars? Did he have enough money in his pouch, or would he have to get more? If so, how much more would he need? If Harry's vault contained \$54 900 567 CAD, how much money would he have in it after his shopping trip?