

Answer on Question #41514– Math - Algebra

Question:

Dick is in charge of purchasing office supplies and his budget is \$175.00. Paper is \$21.99 a box, toner cartridges are 52.90 each and folders are \$0.99 each. All the office supplies are 20% off. If Dick needs to buy 3 boxes of paper and 2 toner cartridges
How many folders can he buy?

Solution:

3 boxes of paper cost $3 \times 21.99 = 65.97$, 2 toner cartridges cost $2 \times 52.90 = 105.8$.

Given that there's 20% off for all office supplies, then 3 boxes of paper cost $3 \times 21.99 \times 0.8 = 52.78$, 2 toner cartridges cost $2 \times 52.90 \times 0.8 = 84.64$, the price of folder is $0.99 \times 0.8 = 0.792$.

So, after buying these things given that there's 20% off for all office supplies, he will have only $\$175 - \$52.78 - \$84.64 = \37.58 .

As $37.58 / 0.792 = 47.45$, hence he can buy only 47 folders.

Answer: 47.