

AP CSA Chain Discount Activity

Objectives

In this activity students will understand how chain discounts work.

Standards

IT-IDT-1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Project Time

This project will take about 2 hours to complete.

Ethics Statement

Students will model work readiness traits required for success in the workplace including teamwork, multitasking, integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Project Details

Students will apply math skills to the calculation of chain discounts. Students will calculate several discounts accurately. Work will be demonstrated through a test.

The ability to understand how chain discounts work will benefit students in most business environments, as well in their personal lives. For example, bundled software is often available in separate packages. Pricing is often based upon which packages are purchased in in what quantity.

RUBRIC

50 points – Worksheet completed accurately.

Don't forget % + #'s 95

Chain (Series) Discounts

Name Jackson S.

A. Change the following percents to decimals.

Percent	Decimal	Percent	Decimal	Percent	Decimal
82%	1. <u>.82</u>	62.5%	2. <u>.63</u>	5%	3. <u>.05</u>
88.7%	4. <u>.89</u>	95%	5. <u>.95</u>	25 3/4%	6. <u>.26</u>
1%	7. <u>.01</u>	77 1/4%	8. <u>.77</u>	.5%	9. <u>.005</u>

B. Find the cash discount in dollars.

List Price, Discount Rate	Cash Discount	List Price, Discount Rate	Cash Discount
\$757.89, 7.1%	10. <u>\$53.81</u>	\$18.42, 3.4%	11. <u>\$0.63</u>
\$559.29, 5.9%	11. <u>\$33.00</u>	\$604.05, 5%	12. <u>\$30.20</u>

C. Find the List Price, in dollars.

Cash Discount, Discount Rate	List Price in Dollars
\$2.70, 5.1%	13. <u>\$52.94</u>
\$6.36, 8.2%	14. <u>\$77.44</u>
\$4.10, .06%	15. <u>\$683.33</u>

D. Find the discount rate, expressed as a percent.

List Price, Cash Discount	Discount Rate
\$214.52, \$6.65	16. <u>3.1%</u>
\$49.87, \$3.84	17. <u>7.7%</u>
\$404.29, \$2.83	18. <u>0.7%</u>

E. The complement of each discount for 15/20/5 is:

16. 15% = .85 17. 20% = .80 18. 5% = .95

F. Find the net-price equivalents and single discount equivalent for each of the following series discounts. Express the single discount equivalent as a decimal and as a percent.

Series Discount	Net-Price Equivalent	Single Discount Equivalent
20/15/3	19. .66	20. 34
15/30/5	21. .57	22. 43.5
30/10/10	23. .57	24. 43.3
20/30/20	25. .45	26. 52.2

G. Use the Net-Price Equivalent from (19, 21, 23, and 25 above) to calculate the net price on the following items.

List Price	Series Discount	Net Price of List
\$ 2,400.00	20/15/3	27. 1583.04
\$1,838.00	15/30/5	28. 1038.93
\$ 940.25	30/10/10	29. 533.12
\$ 500.40	20/30/20	30. 224.18

H. Joe's Nutrition outlet buys bulk vitamins from the Incredible Hulk wholesale. Joe's Nutrition always receives a chain discount of 25/20/10. Joe's Nutrition just bought protein bars with fortified oats for \$2,876.98. Find the amount of the discount.

31. Find the amount of the discount 1323.41

32. Find the net price Joe's Nutrition paid. 1553.57

I. Andy's Audio Outlet received the following order today: 26 Snoop Dogg Headphones at \$360.00 each; 30 iPod purple cases, \$10.50 each; and 90 USB connectors \$36.34 each. Andy's Audio received discount terms of 30/25/20.

33. Find the net price of the order. 5437.15

Extension Activity

Wilson's Hardware Store purchased the following items. Calculate the extended total after the chain discounts for each item, calculate the subtotal, and the total of the invoice after tax.

Quantity	Unit	Item	Unit Price	Trade Discount	Extended Total
250	Ea.	Hammers	\$15.50	20/15/15	2239.75
300	Ea.	Hoses	\$12.30	20/10/5	2523.96
20	Doz.	Wing Nuts	\$5.45	30/20/10	54.94
5	C	Stakes	\$62.98	25/5/10	201.93
Invoice Subtotal					5020.58
Sales tax @ 7.5%					376.54
Invoice Total					5397.12

