

6.4

Analyzing Sales Promotions

Try These

i) $2.5 \times \$1.95 = \$$ 4.88

ii) $4 \times \$9.50 + \$20 = \$$ 58

$\$38$

$$0.80 \times 1200$$

iii) 80% of \$1200 = \$ 960

iv) 20% off \$1200 = \$ 960

$$1200 (0.8)$$

$$(0.2)(1200) = \$240$$

Jack is buying plywood for his cabinetmaking business. Two lumberyards sell $\frac{3}{4}$ inch oak plywood for \$79.98 a sheet, but they offer different promotions.

- Promotion 1: spend more than \$500 and get \$100 off
- Promotion 2: 15% discount off entire purchase → 85% ^{PAY}

Which promotion is better for Jack if he needs 8 sheets?
if he needs 16 sheets?

- 1 If Jack needs 8 sheets of plywood to make new cabinets, which promotion will save him the most money?

$$\$79.98 \times 8 \text{ sheets} = \$ \underline{639.84}$$

$$\text{Promotion 1: } \$ \underline{639.84} - \$ \underline{100} = \$ \underline{539.84}$$

$$\text{Promotion 2: } \$ \underline{639.84} \times \underline{0.85} = \$ \underline{543.86}$$

Promotion 1 saves Jack the most money if he buys 8 sheets.

Jack is buying plywood for his cabinetmaking business. Two lumberyards sell $\frac{3}{4}$ inch oak plywood for \$79.98 a sheet, but they offer different promotions.

- Promotion 1: spend more than \$500 and get \$100 off
- Promotion 2: 15% discount off entire purchase

Which promotion is better for Jack if he needs 8 sheets?
if he needs 16 sheets?

- 2 If Jack wanted to buy 16 sheets of plywood, which option would save him the most money?

$$\$79.98 \times 16 \text{ sheets} = \$ \underline{1279.68}$$

$$\text{Promotion 1: } \$ \underline{1279.68} - \$ \underline{100} = \$ \underline{1179.68}$$

$$\text{Promotion 2: } \$ \underline{1279.68} \times \underline{0.85} = \$ \underline{1087.73}$$

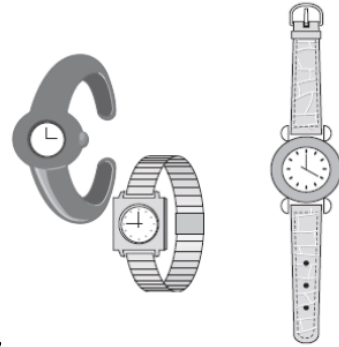
Promotion 2 saves Jack the most money if he buys 16 sheets.

Example

Kristin is buying six watches as gifts for her friends. The store has two promotions to choose from for watches with a regular price of \$12 each.

- ~~The real deal~~ buy one, get one half price
- The big discount: $\frac{1}{3}$ off the purchase

Which promotion should Kristin choose?



Solution

Calculate the price for each promotion.

The real deal: $\$12 \times 3 + \$ \underline{6} \times 3 = \$ \underline{54}$

The big discount: $\$12 \times 6 - \frac{1}{3}(\$12 \times 6) = \$ \underline{48}$

Kristin should choose the big discount.

$\$12 \left(\frac{2}{3}\right) = \8

$\$8 \times 6 = \underline{\underline{\$48}}$