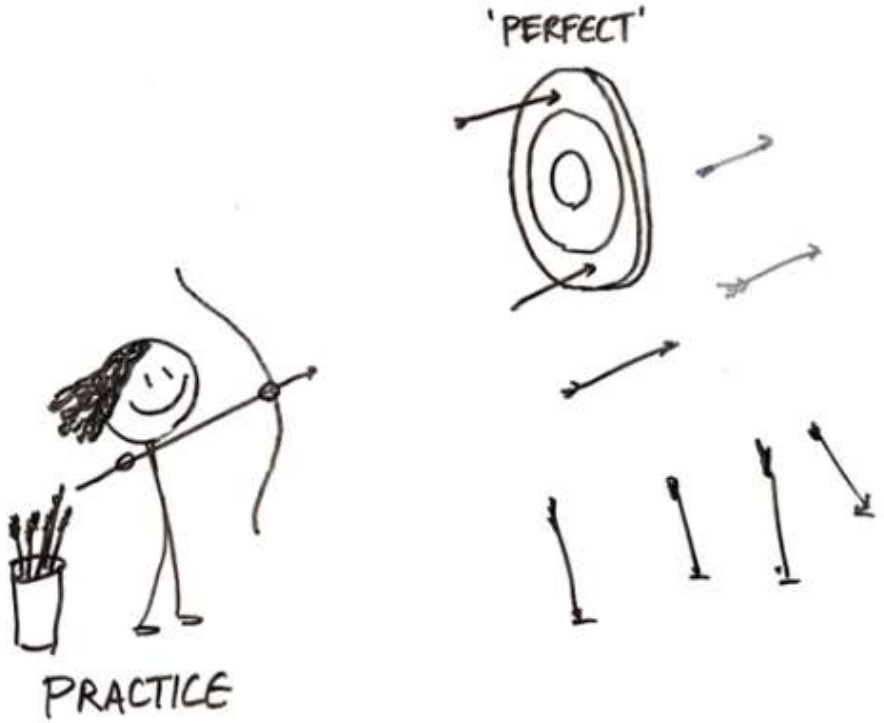
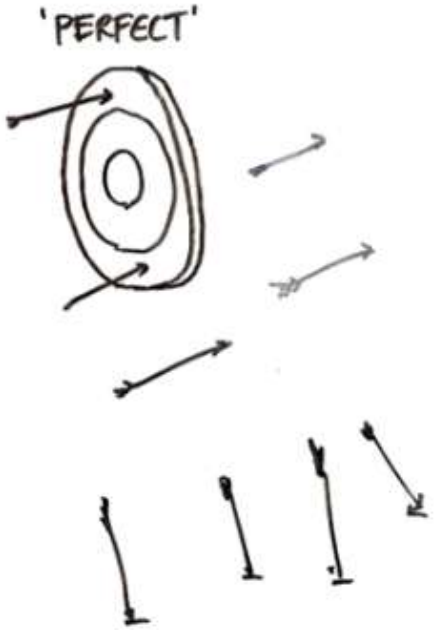
- Practice:
  1. Sam purchased 20 dozens of toys at the rate of Rs. 375 per dozen. He sold each one of them at the rate of Rs. 33. What was his percentage profit?
  2. If books bought at prices ranging from Rs. 200 to Rs. 350 are sold at prices ranging from Rs. 300 to Rs. 425, what is the greatest possible profit that might be made in selling eight books.
  3. A cycle is bought for Rs. 900 and sold for Rs. 1080, find the gain percent?
  4. An article is bought for Rs.600 and sold for Rs.500, find the loss percent?



- Practice:
  5. A single discount equivalent to the discount series of 20%, 10% and 5% is?
  6. Ramu bought an old car for Rs. 42000. He spent Rs. 13000 on repairs and sold it for Rs. 64900. What is his profit percent?
  7. If I purchased 11 books for Rs. 10 and sold all the books at the rate of 10 books for Rs. 11, the profit per cent is?
  8. A person purchased a TV set for Rs. 16000 and a DVD player for Rs. 6250. He sold both the items together for Rs. 31150. What percentage of profit did he make?



Profit & Loss

1. CP = 20 × 375/dozen = 7500

SP = 20 × 12 toy/dozen × 33/toy = 7920

Profit = 7920 − 7500 = 420

Profit % = $\left(\frac{420}{7500}\right) \times 100 = 5.6\%$

2. Greatest profit = lowest cost − 200 highest price = 425

profit per book = 425 − 200 = 225

total profit ~~&~~ ~~loss~~ for 8 books = 1800 ⇒ 8 × 225

3. Profit = 1080 − 900 = 180

profit % = $\left(\frac{180}{900}\right) \times 100 = 20\%$

4. Loss = 600 − 500 = 100

loss % = $\left(\frac{100}{600}\right) \times 100 = 16.6\%$

(5) 20% discount = RS100 - 20% = 80

↳ 10% discount = 80 - 10% = 72

↳ 5% discount = 72 - 5% = 68.40

Single Equivalent = 100 - 68.40 = 31.6

(6) CP = 42000 + 13000 = 55000

profit = 64900 - 55000 = 9900

profit percentage

$\left(\frac{9900}{55000}\right) \times 100 = 18\%$

(7) $cp = \frac{10}{11} \approx 0.909$

$sp = \frac{11}{10} = 1.10$

(8) profit = 1.10 - 0.909 ≈ 0.191

profit % = $\frac{0.191}{0.909} \times 100 \approx 21\%$

(9) Total cp = 16000 + 6250 = 22250

Profit = 31150 - 22250 = 8900

profit percentage $\left(\frac{8900}{22250}\right) \times 100 = 40\%$

~~$\left(\frac{0.191}{0.909}\right) \times 100 \approx 21\%$~~