Practice with Percents; Problem Solving

Percents in Daily Life

battery life
tips
exam scores
class grades
taxes
stocks
money
sales
bank accts./interest
2% milk/nutrition
labor cost vs sales
commission
surveys, data, stats
sports

Key Ideas for Calculations:

- percent: parts per hundred (25% = 25/100 = 1/4 = 0.25)
- absolute vs. relative increase or decrease

  relative change = (absolute change)/(initial amount)

- base of percentage ("out of what", denominator)
- percentage points

  describe absolute change in a percentage (e.g. ratings)

Additive vs. Multiplicative Approach

increase by p%

(abs. incr.) = (P/100) × (amt.)
(new amt.) = (amt.) + (abs. incr.)

vs.

(new amt.) = (1 + P/100) × (amt.)

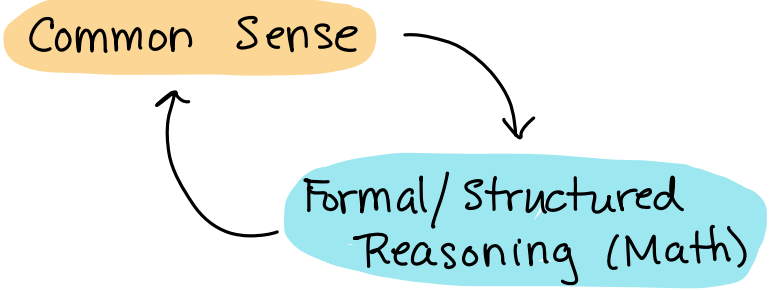
decrease by p%

(abs. decr.) = (P/100) × (amt.)
(new amt.) = (amt.) − (abs. decr.)

vs.

(new amt.) = (1 − P/100) × (amt.)

Solving Real-life Problems



Ambiguity
- what is the real situation?
- what is the real issue?

Problem-Solving Strategies

How to start? What might you try? What if you get stuck?

Report 2 (See Canvas for details.)

Explain (as to a confused peer) how to solve a selection of your group's story problems.

You will need to include:

- at least one from each group member
- at least one involving % increase & one involving % decrease (could both be in one problem)
- at least one involving abs. & rel. change

You should explain both the additive & the multiplicative approach in at least one situation.