Imagine a common on which each of 50 members of a community pastures one head of cattle. Kartuny, like each of the other 49 members, is free, rational and self-interested. Kartuny is considering adding one head of cattle to the common. Should he?

**Step #1:** list the information you want that you do not have!

**Step #2:** decide and justify your decision.
COMMONS PROBLEM---CONSIDERATIONS

THE TRAGEDY OF THE COMMONS:

The tragic logic of the commons is sustained by three premises: a limited commons, cattle that need ample grazing room to prevent the commons from wearing out, and rational, self-seeking herdsmen. If any one of these premises is removed, the tragedy is averted.

THE PUBLIC GOODS PROBLEM:

The public goods problem is the obverse of the commons problem. Just as the rational individual gains by harming fellow members of the common, he loses by benefiting them. At best, he gets only a small return on his investment; at worst, he is economically punished. For example, the good husbandman cannot survive in a market economy; if he maintains his soil while his neighbors mine theirs for maximum yields, sooner or later he must either abandon farming or become a subsistence farmer outside the market. He cannot afford to benefit posterity except at great personal sacrifice. Similarly, although a socially responsible business owner might wish to control the pollution emanating from his plant, if he does it at his own expense whatever his competitors do, then he is at a competitive disadvantage. Thus the tragedy of the commons, in which the culprit gets all the benefits from exceeding the limits of the commons but succeeds in diverting most of the costs to others, is turned around. One who tries to benefit the common good soon discovers that, while he pays all the costs, the other members of the community reap virtually all of the benefits.

The reason is simple: it is entirely rational for individuals to try to make others pay most or all of the costs of a public good that benefits everyone equally; thus the good is never available in optimal quantity under market conditions. For example, no government can subsist on voluntary tax payments---if external defense, internal order, rules for economic competition, public health, education and other public goods are to be produced in quantities sufficient to meet public needs, then taxes must be compulsory on all its members. Similarly, if ecological public goods like clean air and water or pleasant landscapes are to be provided in reasonable amounts, it will be only as a result of collective decisions. Thus, just as for the tragedy of the commons, the answer to the public goods problem is authoritative political action.

(After Garret Hardin and William Ophuls)