

York Buildgs. Decr. 9<sup>th</sup>. 1693.

Sr.

It was my fortune to bee out of towne at Mr Smith's Returne, so as I recd ye favour of Your Letter left for mee by him, but have without successe expected everyday to see him since my being back, that I might ye more particularly render You with my thanks (which I doe most respectfully pay you) my acknowledgmts for ye Satisfaction You are therein pleas'd to give mee upon ye Question I troubled You with by him. I am suspitious hee is not well, that I have been soe long without his Visit, or that hee is not yet informed of my being return'd. I will not however longer respite my observing to You, that the Construction hee would putt upon ye Question (& which I would the rather have discoursed with him on, before my offering you any thoughts of mine upon it) seems no more to mee, than I find it does to You, in any wise warrantable from ye Terms of it; I carrying about mee just ye same notion of its meaning that you doe viz., How much more or lesse Expectation A may (wth equal Lucke) reasonably have; of throwing at one or every throw one Sice [\*] at least with six Dyes, that B two Sices with Twelve, or C three with Eighteen Dyes?

Now if this wording of ye Question sorts as well with your Conceptions of it, as I have endeavour'd to make them speak mine, Then I discern Your Resolution to come clearly up to ye Question in ye Terms I understood it in, & that You give it in favour of ye Expectations of A, & this (as you say) by an easy Computation. But yet I must not pretend to soe much Conversation wth Numbers, as presently to comprehend as I ought to doe, all ye force of that wch you are pleas'd to assigne for ye Reason of it, relating to their having or not having ye Benefit of all their Chances; and therefore were it not for ye trouble it must have cost you; I could have wish'd for a sight of ye very Computation. But I have abundant Reason to sitt downe (as I doe) without hesitancy under Your Determination, rather than keep-up an Enquiry that I have already given you more Interruption by, than I can reasonably expect Your Excuse for.

I must confesse, were I now (after soe much chawing of ye Question) to begin my pursuit afresh after a Solution of it; I think I should avoid some of the Ambiguitys that commonly hang about our Discoursings of it, by changing ye characters of ye dice from Numbers to Letters, & supposing them instead of 1, 2, 3, &c to bee branded with ye 6 initial Letters of ye Alphabet A, B, C, D, E, F. And the Case should then bee this;

Peter a Criminal convict being doom'd to dye, Paul his Friend prevails for his having ye benefitt of One Throw only for his Life, upon Dice soe prepared; with ye Choice of any one of these Three Chances for it, viz.

One F, at least upon Six such Dice.

Two F's at least upon Twelve such Dice.

or

Three F's at least upon eighteen such Dice.

Question. – Which one of these Chances should Peter in this Case choose?

I have ye rather pitch'd upon this Method of stating it, for ye rendring it receptive of as simple and succinct an Answer as (for ye Answerer's Ease) I could. And therefore though I can't absolve my selfe of Impertinence in ye offering it, Yet if You shall please, to what You have already indulg'd mee in it, to throw-in one Act of Kindness more, & tell mee Your thought in ye matter as thus drest, without creating more Worke to Your Selfe in Your Reply, than by giving it mee in either of these 2 Words, the First – The Second – or The Third; I shall yet think I have ask'd too much, & rest ever,

Your true honorer & most  
faithfull humble Servant  
S. PEPYS

[\*]“sice” has the same relation to six as “deuce” to two or “trey” to three (O.E.D)

from H. W. Turnbull, *ed.*, *The Correspondence of Isaac Newton*,  
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