QUESTION

The ideals, art and literature of Renaissance and the Scientific Revolution affected many aspects that made up the period known as the Enlightenment. Using the documents and your knowledge of European history assess the validity of this statement.

DOCUMENT #1

"...The foundations of all true learning must be laid in the sound and thorough knowledge of Latin: which implies study marked by a broad spirit, accurate scholarship, and careful attention to details...The great Orators of antiquity must by all means be included. Nowhere do we find the virtues more warmly extolled, the vices so fiercely decried. From them we may learn, also, how to express consolation, encouragement, dissuasion or advice... Lastly, in oratory we find that wealth of vocabulary, that clear easy-flowing style, that verve and force, which are invaluable to us both in writing and in conversation."

SOURCE: Excerpt from Leonardo Bruni's treatise, On Learning and Literature.

DOCUMENT #2

"Enlightenment is man's leaving his self-caused immaturity. Immaturity is the incapacity to use one's intelligence without the guidance of another. Such immaturity is self-caused if it is not caused by lack of intelligence, but by lack of determination and courage to use one's intelligence without being guided by another. Sapere Aude! {Dare to Know!} Have the courage to use your own intelligence! is therefore the motto of the enlightenment...All that is required for this enlightenment is *freedom*; and particularly the least harmful of all that may be called freedom, namely, the freedom for man to make *public use* of his reason in all matters."

SOURCE: From an essay by Immanuel Kant entitled "What is the Enlightenment?" - 1784.

DOCUMENT #3

"...According to your Cartesians, everything is performed by an impulsion, of which we have very little notion; and according to Sir Isaac Newton, it is by an attraction, the cause of which is as much unknown to us. At Paris you imagine that the earth is shaped like a melon, or of an oblique figure; at London it has an oblate one. A Cartesian declares that light exists in air, but a Newtonian asserts that it comes from the sun in six minutes and a half. The several operations of your chemistry are performed by acids, alkalies and subtile matter; but attraction prevails even in chemistry among the English. The very essence of things is totally changed. You neither are agreed upon the definition of the soul, nor on that of matter. Descartes, as I observed in my last, maintains that the soul is the same thing with thought, and Mr. Locke has given pretty good proof of the contrary. Descartes asserts farther, that extension alone constitutes matter, but Sir Isaac adds solidity to it. How furiously contradictory are these opinions!"

SOURCE: Excerpt from Letters on the English-1778 by Voltaire.

DOCUMENT #4

"No one has ever believed that the human mind could exhaust all the facts of nature, all the refinements of measuring and analyzing these facts, the inter relationships of objects, and all the possible combinations of ideas... But because, as the number of facts known increases, man learns to classify them, to reduce them to more general terms; because the instruments and the methods of observation and exact measurement are at the same time reaching a new precision;...the truths whose discovery has cost the most effort, which at first could be grasped only by man capable of profound thought, are soon carried further and proved by methods that are no longer beyond the reach of ordinary intelligence. If the methods that lead to new combinations are exhausted, if their application to problems not yet solved requires labors that exceed the time or the capacity of scholars, soon more general methods, simpler means, come to open a new avenue for genius..."

SOURCE: Excerpt from Sketch for a Historical Picture of the Progress of the Human Mind by Marie Jean Antoine Caritat, marquis de Condorcet.

DOCUMENT #5

"If you look at the stars without their rays (as may be done by looking at them through a small hole made with the extreme point of a fine needle and placed so as almost to touch the eye), you will see these stars to be so minute that it would seem as though nothing could be smaller; it is in fact the great distance which is the reason for their diminution, for many of them are very many times larger than the star which is the earth with the water. Think, then, what this star of our would seem like at so great a distance, and then consider how many stars might be set in longitude and latitude between these stars which are scattered throughout this dark expanse. I can never do other than blame many of those ancients who said that the sun was no larger than it appears; among these being Epicurus; and I believe that he reasoned thus from the effects of a light placed in our atmosphere equidistant from the centre; whoever sees it never sees it diminished in size at any distance. But I wish I had words to serve me to blame those who would fain extol the worship of men above that of the sun; for in the whole universe I do not see a body of greater magnitude and power than this, and its light illumines all the celestial bodies which are distributed throughout the universe. All vital force descends from it since the heat that is in living creatures comes from the soul (vital spark); and there is no other heat nor light in the universe."

SOURCE: Excerpt From Leonardo Da Vinci's Notes on the Cosmos-1515.

DOCUMENT #6

"... Just as a multitude of laws often creates excuses for vices, so that the best regulated state is that which, having very few laws, makes those few strictly observed, instead of the great number or precepts which make up logic, I thought that the four following precepts would suffice, provided that I could make a firm, steadfast resolution not to violate them even once. The first was never to accept anything as true which I could not accept as obviously true, that is to say, to carefully avoid impulsiveness and prejudice, and to included nothing in my conclusions but whatever was so clearly presented to my mind that I could have no reason to doubt it. The second was to divide each of the problems I was examining in as many parts as I could, as many as should be necessary to solve them. The third, to develop my thoughts in order, beginning with the simplest and easiest to understand matters, in order to reach by degrees, little by little, to the most complex knowledge, assuming an orderliness among them which did not all naturally seem to follow one from the other. And the last resolution was to make my enumeration so complete and my reviews so general that I could be assured that I had not omitted anything. Theses long chains of reasoning, so simple and easy, which geometers customarily use to make their most difficult demonstrations, caused me to imagine that everything which could be known by human beings could be deduced one from the other in the same way...."

SOURCE: Excerpt From Rene Descartes' Discourse on Method, 1673.

DOCUMENT #7

"...Men who were well grounded in astronomical and physical science were persuaded as soon as they received my first message. There were others who denied them or remained in doubt only because of their novel and unexpected character, and because they had not yet had the opportunity to see for themselves. These men have by degrees come to be satisfied. But some, besides allegiance to their original error. posses I know not what fanciful interest in remaining hostile not so much toward the things in question as toward their discoverer. No longer being able to deny them, these men now take refuge in obstinate silence...Possibly because they are disturbed by the known truth of other propositions of mine which differ from those commonly held, and therefore mistrusting their defense so long as they confine themselves to the field of philosophy, these men have resolved to fabricate a shield for their fallacies out of the mantle of pretended religion and the authority of the Bible...First they have endeavored to spread the opinion that such propositions in general are contrary to the Bible and are consequently damnable and heretical..."

SOURCE: Excerpt from A letter from Galileo to the Grand Duchess Cristina -1615.

DOCUMENT #8

"Rule I: We are to admit no more causes of natural things, than such as are both true and sufficient to explain their appearances. To this purpose the philosophers say, that Nature does nothing in vain, and more is in vain, when less will serve; for nature is pleased with simplicity, and affects not the pomp of superfluous causes.

Rule II: Therefore to the same natural effects we must, as far as possible, assign the same causes. As to respiration in a man, and in a beats; the descent of stones in Europe and in America; the light of our culinary fire and of the sun; the reflection of light in the earth, and in the planets...

Rule IV: In experimental philosophy we are to look upon propositions collected by general induction from phenomena as accurately or very nearly true, notwithstanding any contrary hypothesis that may be imagined, till such time as other phenomena occur, by which they may either be made more accurate, or liable to exceptions. This rule we must follow that the argument of induction may not be evaded by hypotheses."

SOURCE: Excerpt from the Mathematical Principles of Natural Philosophy by Isaac Newton.

DOCUMENT #9

" 'Man is multitudinous, varied, and ever changing' Why do I emphasis this?

Considering that we are born with this condition, that is, that we can become whatever we choose to become, we need to understand that we must take earnest care about this, so that it will never be said to our disadvantage that we were born to a privileged position but failed to realize it and became animals and senseless beats. Instead, the saying of Asaph the prophet should be said of us, 'You are all angels of the most high.' Above all, we should not make that freedom of choice God gave us into something harmful, for it was intended to be our intended to be our advantage. Let a holy ambition enter into our souls; let us not be content with mediocrity, but rather strive after the highest and expend all our strength in achieving it."

SOURCE: Excerpt From *Oration on the Dignity of man* by Pico Della Mirandola 15c.



