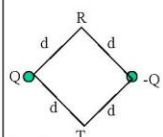


EXAM 2

Rnumber	Exam2
R00151631	68
R00542746	
R00645753	100
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R00762970	68
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R00867387	68
R00867424	68
R00920841	84
R00945392	100
R01025253	
R01045676	84
R01074223	36
R01074436	68
R01075399	100
R01077981	84
R01080567	84
R01084235	84
R01085510	68
R01085771	52
R01109294	84
R01113113	100
R01128456	86
R01148464	100
R01148668	100
R01165984	84
R01174627	17
R01175146	100
R01175785	34
R01176443	100
R01178396	100
R01182017	68
R01189420	100
R01290875	100
R01309869	
R01314078	100
R01314409	100
R01344090	100
R01345745	100
R01348865	100
R01382754	84

Summer 2015. Exam 2. QQ 1-3

<p>#1. Choose the correct statement:</p> <ul style="list-style-type: none"> A proton tends to go from a region of low potential to a region of high potential The potential of a negatively charged conductor must be negative If $E = 0$ at a point P then V must be zero at P If $V = 0$ at a point P then E must be zero at P None of the above are correct 	<p>#2. Points R and T are each a distance d from each of two particles with charges of equal magnitudes and opposite signs as shown. The work required to move a particle with a negative charge q from R to T is:</p>  <ol style="list-style-type: none"> 0 kqQ/d^2 kqQ/d $kQq/(2d)$ 	<p>#3. A conducting sphere with radius R is charged until the electric field just outside its surface is E. The potential of the sphere, relative to the potential far away, is:</p> <ol style="list-style-type: none"> zero E/R E/R^2 ER ER^2
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Summer 2015. Exam 2. QQ 4-6

<p>#4. An electron volt is :</p> <ul style="list-style-type: none"> the force acting on an electron in a field of 1N/C the force required to move an electron 1 meter the energy gained by an electron in moving through a potential difference of 1 volt the energy needed to move an electron through 1 meter in any electric field the work done when 1 coulomb of charge is moved through a potential difference of 1 volt. 	<p>#5. Two electrons are fixed 0.2 cm apart. Another electron is shot from infinity and stops midway between the two. What is its initial speed?</p> <ol style="list-style-type: none"> 0 3 cm/s 1000 m/s 50 km/s 300000 km/s 	<p>#6. A charged isolated metal sphere of diameter 1 m has a potential of 1 V relative to infinity. The electrostatic energy density near its surface is:</p> <ol style="list-style-type: none"> 10 N/C 1 J/m^3 100 eV/cm^3 0.08 F/m 280 F/N
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