

Homework 1 due 8/24/06

Problem 1: 4.3012 m
 Problem 2: -144.46°
 Problem 3: 59.683 m/s
 Problem 4: 58.707°
 Problem 5: 7.8103
 Problem 6: 59.193°
 Problem 7: 4.472 m
 Problem 8: -26.565°
 Problem 9: 28.925 units²
 Problem 10: 4
 Problem 11: 60.255°

Homework 2 due 8/29/06

Problem 1: 3.125×10^{13}
 Problem 2: 6.8816 N
 Problem 3: 4.423×10^{-8} C
 Problem 6: -0.1 m
 Problem 7: 3.5176×10^{13} m/s²
 Problem 8: 3.3333×10^{-8} s
 Problem 9: 0.01954 m
 Problem 10: 127927 N/C

Homework 3 due 8/31/06

Problem 1: 1.5856×10^6 N/C
 Problem 4: 2.1894×10^6 N/C
 Problem 5: -2.4792 $\mu\text{C}/\text{m}^2$
 Problem 6: 6.641×10^6 N/C
 Problem 7: 2.4116×10^7 N/c
 Problem 8: 6.395×10^6 N/C
 Problem 9: 664080 N/C
 Problem 10: -5.2755×10^{17} m/s²
 Problem 11: 0.8530mm

Homework 4 due 9/5/06

Problem 1: 857.5 Nm²/C
 Problem 2: 0 Nm²/C
 Problem 3: 656.88 m²/C
 Problem 4: 4.138×10^6 N/C
 Problem 5: 677645 Nm²/C
 Problem 6: 1.61776×10^7 N/C
 Problem 7: 8.088×10^6 N/C
 Problem 8: 1.61776×10^6 N/C
 Problem 9: 0 N/C
 Problem 10: 7.19×10^6 N/C
 Problem 11: 0 N/C
 Problem 12: 365119 N/C
 Problem 13: 1.4605×10^6 N/C
 Problem 14: 649101 N/C

Homework 5 due 9/7/06

Problem 1: 9.1301×10^{-7} C
 Problem 2: 0 N/C

Problem 4: 7058.8 N/C
 Problem 15: -9.9472×10^{-5} C/m²
 Problem 16: .00038197 C/m²

Homework 6 due 9/12/06

Problem 1: 4.32588×10^{-16} J
 Problem 2: 508380 m/s
 Problem 3: 0.3 m/s
 Problem 4: 1617.76 J
 Problem 5: 2.157 J
 Problem 6: 10.8229 m/s
 Problem 7: 9.5189 V
 Problem 8: 3.37 J

Homework 7 due 9/14/06

Problem 1: 1.8311×10^{-8} F
 Problem 4: 3.7384 pF
 Problem 5: 74.7687 pC
 Problem 6: 15.5771 pF
 Problem 7: 256.79 kV
 Problem 8: 4.2857 μF
 Problem 9: 1.3369 μF
 Problem 10: 16.0427 μC
 Problem 11: 3.5984 μC
 Problem 12: 12.444 μC
 Problem 13: 16.0427 μC
 Problem 14: 90 mJ

There is no homework 8**Homework 9 due 9/21/06**

Problem 2: 33.333 C
 Problem 3: .00028065 m/s
 Problem 4: 6.42857 A
 Problem 5: 1.5625 R
 Problem 6: 13.75 Ω
 Problem 7: 7.3855 A

Homework 10 due 9/26/06

Problem 1: 4 Ω
 Problem 2: 3.9344 A
 Problem 3: 11.803 V
 Problem 4: 46.44 W
 Problem 5: 0.77399 W
 Problem 6: 1000 Ω
 Problem 7: 2.4 A
 Problem 8: -0.5 A
 Problem 9: 2.9 A
 Problem 11: 0.91667 A

Homework 11 due 9/28/06

Problem 1: 0.75 A
 Problem 4: 1.3534 V
 Problem 5: 2.38844 V

Problem 6: 5.7914×10^{-7} s
 Problem 7: 6.8×10^{-6} C
 Problem 8: .0006 C

Homework 12 due 10/03/06

Problem 5: 2.8836×10^{-18} N
 Problem 6: -1.9224×10^{-18} N
 Problem 7: -3.204×10^{-19} N
 Problem 8: 1.08889 A
 Problem 9: 7.14477 mT
 Problem 12: 125000 V/m
 Problem 13: 625000 m/s
 Problem 14: 2.66602×10^{-26} kg
 Problem 15: 0.26 m

Homework 13 due 10/05/06

Problem 1: 26.1799 μT
 Problem 2: 2 cm
 Problem 3: 28.284 μT
 Problem 5: 60.017 μT
 Problem 6: 8.66×10^{-6} N/m

Homework 14 due 10/10/06

Problem 5: 4.4898 nT
 Problem 7: 67.826 A
 Problem 8: 31.831 mA

Homework 15 due 10/12/06

Problem 1: 0.06183 V
 Problem 2: 0.67419 V
 Problem 3: 57.6 N
 Problem 4: 115.2 W
 Problem 5: 0.001111 V
 Problem 6: 0.004 V
 Problem 8: 3712.5 V
 Problem 10: 0.00045784 V

Homework 16 due 10/17/06

Problem 1: 2.1695×10^{-9} Wb
 Problem 2: 1.1294×10^{10} Vm/s
 Problem 3: 0.1 A
 Problem 4: 129.02 mA
 Problem 5: 25.327 m/s
 Problem 6: 1.8 mV/m
 Problem 8: 1.875 mV/m
 Problem 9: 63.2227 mV

There is no homework 17**Homework 18 due 10/24/06**

Problem 1: 0.000383726 T
 Problem 2: 5.73943×10^{-8} Wb
 Problem 3: 0.715793 mH
 Problem 4: 7.16533×10^{-6} H

Problem 5: 0.00573227 H
Problem 6: 2.55874 ms
Problem 7: 2.39496 A
Problem 8: 145.279 ms
Problem 9: 152 V
Problem 10: 29.1291 W
Problem 11: 16.9525 W
Problem 12: 7.28228 J
Problem 13: 0.780324 s

Homework 19 due 10/26/06

Problem 1: 192.667 Ω
Problem 2: 1.5 A
Problem 3: 80 Ω
Problem 4: 9.4248 Ω
Problem 5: 15.916 A
Problem 6: 470316 Hz
Problem 7: 140.751 mA
Problem 8: 234.584 mA
Problem 9: 15.973 Ω
Problem 10: -12.0363 Ω
Problem 11: 3.5588 kHz
Problem 12: 5 A
Problem 13: 2236.07 V

Homework 20 due 10/31/06

Problem 1: 2.0014×10^{-8} T
Problem 2: 600415 W
Problem 3: 7.4948 m
Problem 4: 2.5×10^{-8} s
Problem 5: 2.5017×10^{-6} T
Problem 6: 0.1 N/C
Problem 7: 2×10^{-5} T
Problem 8: 1.59 16 W/m²
Problem 10: 0.0023495 T
Problem 11: 6.50333×10^8 W/m²
Problem 12: 510.77 W
Problem 13: 8.31655×10^7 W/m²
Problem 14: 73.391 W

Homework 21 due 11/2/06

Problem 1: 31.4866°
Problem 2: 48.753°
Problem 3: 4.7376×10^{14} Hz
Problem 4: 483.05 nm
Problem 5: 2.2885×10^8 m/s
Problem 6: 1.35
Problem 7: 1.60033
Problem 8: 38.673°
Problem 9: 41.595°
Problem 10: 18.405°
Problem 11: 27.347°
Problem 12: 42.347°

Homework 22 due 11/7/06

Problem 1: -1.3636 cm
Problem 2: 0.090909
Problem 3: 0.26471 m
Problem 4: 30 cm
Problem 5: 16.667 cm
Problem 6: -0.66667
Problem 7: -10 cm
Problem 8: 2
Problem 9: -15 cm
Problem 10: -5.7143 cm
Problem 11: 0.2857
Problem 12: 0.85714 cm

Homework 23 due 11/9/06

Problem 1: 0.1275 m
Problem 2: 39.335 cm
Problem 3: -12 cm
Problem 4: 0.4
Problem 5: 0.8 cm
Problem 6: 15 cm
Problem 7: -0.5
Problem 8: -10 cm
Problem 9: 2
Problem 10: 1.3333 f
Problem 11: 0.8 f
Problem 12: 5
Problem 13: 85 cm
Problem 14: 2

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Homework 25 due 11/16/06

Problem 1: 436.667 °C
Problem 2: 2099 °C
Problem 3: 1080 mL
Problem 4: 85.47 °C
Problem 5: 452.54 J/kg°C
Problem 6: 114.492 g
Problem 7: 720 cal
Problem 8: 24.783 °C
Problem 9: 6.25 g

Homework 26 due 11/21/06

Problem 1: 3352 m³
Problem 2: 0.414 kg
Problem 3: 3.37448×10^{31} J
Problem 4: 138.24 MJ
Problem 5: 1.3412 kW
Problem 6: 2061.04 times larger

Homework 27 due 11/28/06

Problem 1: 17.9739 m

Problem 2: 277.144 kPa
Problem 3: 420 K
Problem 4: 0.0046697 mol
Problem 5: 74141.8 Pa
Problem 6: 1.4988×10^{29}
Problem 7: 7308.45 J
Problem 8: 6.068×10^{-21} J
Problem 9: 132.06 m/s
Problem 10: 40.0906 K
Problem 11: 6013.99 m/s

Homework 28 due 11/30/06

Problem 1: 1.1818×10^6 J
Problem 2: 338.342 J
Problem 3: 4520 J
Problem 4: 4181.66 J
Problem 5: 0.04104 m^3
Problem 6: -5.4807 kJ
Problem 7: -5.4807 kJ
Problem 8: 7.5 kJ
Problem 9: 900 K
Problem 10: 1.6479
Problem 11: 7.6467 L
Problem 12: 304.588 K

Homework 29 due 12/5/06

Problem 1: 37.576 atm
Problem 2: 552.74 °C
Problem 3: 861.346 K
Problem 4: 557.771 K
Problem 5: 8.7672 L
Problem 6: 900 K
Problem 7: 657.54 K
Problem 8: 335.789 J
Problem 9: 8640 J
Problem 10: 6145.65 J
Problem 11: 2494.35 J
Problem 12: 1.38629 atm
Problem 13: 365.506 K
Problem 14: 253.348 K

Homework 30 due 12/7/06

Problem 1: 8.69625×10^8 J
Problem 2: 3.29625×10^8 J
Problem 3: 555.214 °C
Problem 4: 0.485022 °C
Problem 5: 0.511641
Problem 7: 24 J
Problem 8: 144 J