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 & R X U V H R X W O L Q H I R U) D O O

\$ O W K R X J K W K L V D F D G E H P I G F L I V H H D U Q P W J K W L W W H L W Q F & Q I P Y M U W H G
 W K U L Y L Q J F: D H P I S Q & R X U D J H \ R X W R J E K / H D F O N 6 R / X X W G M C K H E M L S M H U L H Q
 W R P D Q D J H \ R X U D F D G H P L F V D Q G Z H O R D Z E Q U L Q Q L Q \$ N G Q S L M R L Y R C
 D Y D L O D E O H U H V S R R X U W F H W X M G H Q X S V R Q V D I Q G V R I I Z E D P X S Z X V F D K H D

7 H F K Q L F D O 5 H T X L U H P H Q W V

6 W D E O H L Q W H U Q H W F R Q Q H F W L D R S Q W R S R U F R P S X W H U

: R U N L Q J P L F U R S K R Q H

: R U N L Q J Z H E F D P

& R X U V H 2 Y H U Y L H Z D Q G , P S R U W D Q W ' D W H V

' H O L Y H R G H	' D W H V	7 L P H
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' H W D L O V D E R X W L S @ P B # \ B D ([D P 3 H U L R G		

6 H S W H P E H U	1 R Y H P E H U E H U	' H I R H I P P E H U	' H F H P E H U
1 R Y H P E H U	/ D U R V S Q D I L W W R W G W H R U P D K D I O U V F V R X U W W H P Z K W Q R F X W S H Q D		

& R Q W D F W , Q I R U P D W L R Q

& R X U V H & R R U G L Q D W R U	R Q W D F W , Q I R U P D W L R Q
' U / D W p / D Z V R Q + H O O X	2 : / P H V V H D W R / D Z V R Q Q D H Z Q B Q K

& RXUVH 'HVFULSWLRQ DQG 'HVLJQ

Préalable

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EDVpH VXU OH 7HVW GH 3ODFHPHQW

D U R W H S P H U Q P W V G / T p R V Q X G X I V p

Description

/H FRXUV)UHQFK \$F R X W V X Q G F R B p G L X V L G S H X F W X r u w u H T X W L O L V p
O ¶ R E W H Q & M I U R N Q I G X D W G H I U D Q b D L V S G H R H D G I B U U B Q o D L V G H V D II

/H FRXUV YLVH j G p Y H O R S S H U O D F R P R X Q Q p F D W M R Q G B Q D O O H H
V S p F L I L T X H K G H U F O D H U G H F X Q H P S O R L

/D J U D P P D L U H H W O ¶ I M [S W H M S V L p R V Q Q F V H Q W O D p X Y B R X Q W L R Q G G H V W
W H V W V S R X U F H F R X U V

Matériel

7 R X W O H P D W p U L H Q H O W J Q H V I S K R Q L O D O / V L W O H Q G X D F R U X U H Q j D F K H W

0RGH	'DWHV	7LPH)UHTXHQF
9LUWXDO V\QFK	URQRXV	7XHVG D \V	SP
9LUWXDO DV\QF	KURQRXV	1 \$	ZH

- \$ V \ Q F K U R Q R X V S U H Z R O N W P H Q V S U E L H R B R V P S / W L Q Q K U R Q R X V V H
- \$ W W H Q G D Q F H D W H V Q E R Q R Q L R X V H T X L U H G
- O L V V H G Z R U N V K R X O G E H I K R R S \ O H W H G Z L W K L Q
- \$ U H F R U G L Q J R Y D Q H E G K I U R U Q R V Q F V H V V L R Q V
- & O R V H G F D S W L R Q L Q R Q L D Q X G E H R & U R Y R Q B G Q J V

\$ O O F R X U V H P D W H U L D O Z K W O O S E H R S Z R S C M H G F D Q J 2 : V Z L O O E H L Q G L
2 : / V L W H D Q G G L V F X V V H G Z L W K W K H F O D V V

, I V W X G H Q W V Q H H G D V V L V W D Q F H W : K H A H D Q S V H O H N H V Q S D S A R L U M O R
F D Q F R Q W D F W H M Q H 7 H F K Q R O R J \ 6 H T K H L F R D Q F E B I S C R Q M D F W H G E \ S
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* R R J O H & K R U R P H O O D D L W H H I R K H S U H I H U U H G E U R Z V H U D W M R X B S W L P
E U R Z V H U V I U H T X H Q W O I V W 6 H V G Q B Q H A V D W D W M H Q J V S K H G U H S Q H D V H F

/H D U Q L Q J 2 X W F R P H V

/H V R E M H F W L I V S U L Q F L S D X [G X F R X U V V R Q W O H V V X L Y D Q W V
L G H Q W L I L H U O H V D F E L L O / V U p H Q K G D P H P S D Q R I E B Q Q H
L G H Q W L I L H U V O I S V R G I p H E / V X I R V Q Q H I O P D C F D Q S O C R H L O ¶ H P
L G H Q W L I L H U O H V P H Q W K F S C R H V T X H L F K H I L V F W F H R U P S U Q H Q I B S B R X L Q H
G ¶ H P S O R L
U p G L J H U X Q H O H W W F U R H Q G B I L R Q F Q Q M G D W H Q D U Q S R Q F H j X Q
p F U L U H X Q & 9 H Q E R H Q S H F Q W H D V Q S V U G F D A X H R U P H D O N D W W Y B I X V W V
V H S U p S D Q H H Q W U H W L H Q G ¶ X I B D D X C F H H Q X W D Y H V G L H H Q ¶ G ¶ H P E D X F

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%HORZ LV WKH HYDOKDW MRQH FURKDJV GR ZQ OQ HEYL DFW PR QL FDWH

\$VVHVVPHQW)RUPDW JKWLQ	:MH 'DWH
4XL] PLQ	YQDFODVV	6HSWHPKEHU
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'HYRLU j UHPHWWUH	\$VVLJQPH	QW WK To be submitted via YHPEHU Word format through OWL via email to the Instructor (.../Messages/Compose Message/To: Lawson-Hellu (lawsonh)
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\RX VXFFFHG LQ WKLV FODVV
)ROORZ ZHHNO\ FKHFNOLVWV FUHD WRHIGHRS 2R/XRVUWFDU HRDW
 7DNH QRWHV DV \IRHK ORI WV\KUQR D\K MV M\B R\ O V M UDMD WR XW K BX O G
 WR IDFH FRXUVH .HHSLQJ KDQGZULWWXQDQFR:VR H\Y G RGUR F\XYPH
 ZLOO KHOS \RX O HYDHUQ W\K\IDQ \W\K\IDQ \W\K\IDQ \W\K\IDQ YRLIG H\B W F K
 & RQQHFW ZLWK \W\K\IDQ RQOQ L\Q\H V WUX GR H\J\W\K\IDQ J\W\K\IDQ DWZ H
 EDVLV IRU VWXG\ DQG SHHU VXSSRUW
'R QRW EH DIUDLG WR DVN TXHVWKR\Q W R,S L\FR XF B\H F\N V\W\K\IDQ
 GLVFXVVLRQ ERDUGV LRQV W\K\IDQ \W\K\IDQ R\Q\H V\W\K\IDQ D\K\W\K\IDQ Q W V
 5HZDUG \RXUVHOI IRU VXFHVVHV X\W\K\IDQ PIV IN\Q\K\IDQ ZLWLQJ LV VRPHWKLQJ ZDLWLQJ IRU XV DW WKH HQG RI WKH WDVM

:HVWHUQ \$FDGHPLF 3ROLFLHV DQG 6WDWHPHQWV

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, Q WKH LQWHUHVW RI WKH KHDOWK PDDQLGH VSUJ R WLGRH UWW X B XI OW M DQ GOI
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LOOQHVV \RX VKR XQOOGI \XW IS H\B IRUHV\LV QW R\RG QW D NHV WKH SODFH RI WKH
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<RX DUH UHTXLUHG WR VHOI UHSRUKQ DHEYOHU WORDF RAPKSDOMA WRHIX FDRUXHU VIO
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\$ 6SHFLDO ([DPLQDWLRQ LV DQ\ H[DPLQJ DDWPLRQOD VR WRKQH UDWQKG DLQWWRKQH
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& R U U H V S R Q G H Q F H 6 W D W H P H Q W

7 K H F H Q W U D O O \ H D B B I L Q L D / F S T B R X D Q G H G W R V W X G H Q W V Z L O O E H F R Q V
R I I L F L D O X Q L Y H U V L W \ H P D L O D G G W H K V H V D F W R I X Q W W K H R O J G H S R M Q R / L H Q V X
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F D Q U H D G D E R X W W K M U S L W L Y B I F W B Q G 8 : 2 H W H P D L I O D F F R X Q

7 X U Q L W L Q D Q G R W K H U V L P L O D U L W \ U H Y L H Z V R I W Z D U H

\$ O O D V V L J Q I P H I Q W E M H L I O V W R V X E P L V D V U L R A Q I U R H U Y W H H Q W M R D Q / K H L P F L R O P P H U F
G H W H F W L R Q V R I W Z D U H X Q G H U O L F H F Q W L H R Q / R I W S Q H D S Q Q D V H V R P L W G W R Q H V Q
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D V V R X U F H G R F X P H Q W V L Q W K H U H I H U H Q F H H W G H D W D Q D V S H O D R J U D W K M P S
V X E V H T X H Q W O \ V X E P L W W H G W R W K H V W W H M H W P W & R V H V R H V Q K F H Q A U U Q U F
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\$ U W V D Q G + X P D Q L W L H V) U H Q F K 6 W X G W B D W \$ P B I Q M P V L F 3 R O L F L I
+ D U G Z D U H V R W H Z D Q U H W F Q R Q Q H F W L R Q

- X V W D V \ R X Z R X O G S U H I S D U D H Q \ R X Q U F D P S S D U F R Q X U W R H X U S E R P S X W H U L
U H V S R Q V L E L O L W U H & W R Q M Q E M W H K D H W H H W H A R Q F A D V O I B H T W K U V F R X U V H
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‡ D S H U V R Q D O E D F N X S

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6RPH RQOLQH WHVWV DUH PHWHUHG DIQ G XFDIQ QVRWKLBHDQH DWRHQUPHQS WH
7XUQ SRKXRUQH RM ZHOO DV DOO PHVVDJLQJ RU HMD LROXVZU W K DQRHL WHKD
SRS X\$QGRZV

7R DYRLG SRVVLEOH VRIWZDUH JOLWFKHLW EMIRLGSHW DSDQW WDR XWUH
FRPSXWQG ODXQFK RQO\ RQH EURZVHU DSSOSHFQ WDQ QQ QZHRDWWKHRIQ O\ P
SURJUDPV ULXQ QMLKQHJ EDFNJURXQG

\$W WKH HQG PDNH Q&UIRXBXDQYZHUV EMIRRH YRQ GLXQEP

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D O O Q R U P D O F R X U V H U H O D W H G P D W W H U V

‡ 3 O H D W R H Q Q L Q J W K H , Q V W U X F W R U ¶ V S H U V R Q D O V ³ \$ X H Z U R W D H L Q D L Q Q M R R U
R Q O L Q H F R X U V H

‡ 6 W X G H Q W V D N H H D S G D Y I R A S D O V R Z U L W W H Q F R U U H V S R Q G H Q F H R Z Q L W K W K
R I W K H F R X U V H

& R S \ U L J K W D Q G \$ X 5 G H L F R R O G G Q J 6 W D W H P H Q W

& R X U V H P D W H U L D O S U R G X F H G E \ I D F X G O W F H L W K F R / S P U D L W K W L H D G O D I Q G D / C