

JOHN A. LOGAN COLLEGE

FY24 FY27



7DVN)RUFH 6XPPDU\

-RKQ \$ /RJDQ &ROOVMLHMXWLSR/QDORLQVYRQ WKURXJKQ OHDU
FRPPXQLW\ HQJDJHFNQWPHQW/PDQ GHUFWHWQMLVR QHSDQW &HIFW
VWURQJ DFDGHPLF KSHURJHDFW RW RO BFWXVXQW W DQDQS URYL
WKURXJKRXW WKH WQXSURVLRQD OVSXLFVQWV/DXFFS URYLGHV
RYHUYLHZ RI WKH)KJLF)QUR6VDPHQW W O BQDQHDFQVGHV DLOV
WKH 6(0 DOLJQV ZLWK WKH &RBOBUHFKVQJLWQURQOPHQW WD
3ODQ LV WR LQFUHDVH VWXGHQW KLDGFRDXQW DQGDFWIDGLM
EHQFKPDKHN 6(0 3ODQ KDRXUVVVRDEOMWKKDVBHEZWLFFZQ WR SURYL
JXLGDQFH IRU UHDFKLQJ WKH IRXUKSHHBBBQWUQFRXMDVHQHQ

*RDO ,QFUHDVH 6VWXGHQWGHVGHVGRRXURQ ZLQVGH DURSFXMVHQV
PLQRULW\ VWXGHQWV DQG DGXOW OHDUQHUV
7DFWLFV

/RJDQ 6SRWOLJKW \$OXPQL 5HODRWDRQSFDDQGF 6VWURQHQB
&RPPXQLW\ 2XWUHDFK
&ROOHJH %ULGJH
\$FDGHPLF 3URJUSURQVWYKDW BDRBPIXQLW\ 1HHGV
2XWUHDFK WRQVUHZKRXVGVWVH*UDGXDW

*RDO ,QFUHDVH &RXUVH 5HWHQWLRQ
7DFWLFV

(DUO\ \$OHUWV
:LWKGUDZ 5HDVRQV
7LPHO\ DQG 7DUJWVWV &RPPXQLFD &RPPXQLFDWLRQ
:HHNO\ \$WVHQGDQFH 7UDFNLQJ LQ ' / DQG 0LGWHUP *UD
\$IIRUGDEOH DQG \$FFHVVEOH &RXUVH 0DWHULDQV

*RDO ,QFUHDVH 6VWXGHQWGHVGHVGRRXURQ ZLQVGH DURSFXMVHQV
7DFWLFV

0HDQLQJIXO (QJWVXQWV2SFSUR 6VWXGHQWV
0HQWDO +HDQWK 6HUYLHV
2XWUHDFK WR &XUVVVRDEOMWKKDVBHEZWLFFZQ WR SURYL
\$FFHVVE`- / DQG°0@ À 0#W 0#W 0#W @ €K 0#W @ €K <
0HDQLQ @PöPp`0€€@ " WXJQASR5p0#W Q 0€X0 •0öp0]

7KH IXOO UHSR W M G S U R Y R H G F D U V G L H R O O D M F H H Q M P D S W L R Q R I W K H V H
PHDVXUDEOH JRDEVS WRF G M W H R U P L Y O U H D N K L Q R J B I Q G K R W D F W L F
SUHYLRXV GDWD R B O K P L H B O L J S H W U R A Q K H V H B I Q U F R P L S H O M M Q W Q W U H
% H F D X V H W K L V Q V D R I R I X U W D F D W L F S O D Z L G G F R E F S O G L W H I G D W L H W K L Q
RU W Z R Z K L O H V R F H I X Z O O O R K H U T X H B I H F W L O R I Q I D U Q G R R W K H U V P
EH F D U U L H G I R W Z S O G Q V R R V R B L Q H V L D Q Q V B I F F R R X P S V O D H E L L O R L Q V R I V
L Q L W L D W L Y H V D F Q X S S D R M L G H D S H O D Q E S B O R U G K S F R I G W D Z L O V K H H
F D O H Q G D U \ H D W H Z S R W K V V D K Y H L D D E V O H E \ - X Q H

7KH 6(0 3ODQ ZDV FO O D E R H U G W V L Y H F F I X O W M L Q W B O I Y L D Q J I D
DGPLQLVWUDWRUV IURP DFURVV WKH D & R I O G H W R I F \$ F \$ Q O H W N K
LQIRUPDWLRQ DQG IRUPXODWH WKH I H Q W D D V G R F E X P H I Q V F O K B
&KDLU 5DFKHO 6N F I G B U: H R E & R O O H J H 5H D G L Q H V V
&R &KDLU &KULV D Q G W B I Z B Y R X G S I O W U V \$ M D L U
0HPEHU (VPDULH W B R O O H S Y U \$ M H L V R U R I % L R O R J \\
0HPEHU \$ S U L O O D U W L Q H] O D Q D J H U R I 5 H F U X L W P H Q W 6 W
0HPEHU -RUGDQ O D \ V \$ V V L V W D Q W I H L F W L 3 U H Q H L G H Q W H R H D Q U
0HPEHU (P L O \ O R Q W L \$ V V R F L D W H O D R O J H U R I & X U U L F X O X
0HPEHU & R Q Q L H V S U R X E L O R B Q R I , Q R V P H W R O R J \\
0HPEHU 6 W D F L 6 K D S I G Y D G \$ N F H Q W R I (W R F X W I L W K H L U S H &) R X Q G
0HPEHU . D \ O H H 6 P L D Q D J \$ M U R F S E W P H V V L R Q V 5 H F R U G V
0HPEHU . D U O D H F W E R L L Q R I ' \$ G X O W (G X F D W L R Q

* R D O , Q F U H D V H 6 W B Q G B Q & U H B D V F R R X Q U W E \\
D I R F X V R Q X Q G H U Q R H S L W H V D H Q Q V B G X P L W O H

-R K Q \$ / R J D Q & R O G H W R L V H F R I P Q L W W H V 6 B X J L R H Q U Q K B O & L R O O H
U H F R J Q L J H V W K H L P S R U W D Q W U R X O H L W \ S O D X F O D M Q B S Q R V B S D O
Z L W K L Q W K H G L V W B Q F S V O D Q R S B D F H W D D K I H R W X I G R I Q R X S R I V W X
H Q F R P S D V V D Y D W I F H W H V R K Q I H F L G H U S X O G W D J R I Q U D Q J D V S I B R Q I L
W K H) D O O V H I P M H V G H J U R X I S H U W S U I H W K B W O R F H Q O W H K H L D R G F R X
D W W K H & R O O H J H U J F R Z H I G H J W R W S H D F F R I X Q K H V W R U V B O H F U H G L W
W K H S X U S R V H R I J M M K H G 6 (J U R X S H L W D G H I Q Q R G O H G V L V Q X G H I Q R W P I
K R X U V H [F O X G L Q J F R X O D O H J H U H Z R L U N H E O U S H I G X X O F W W D R Q F H G X F

7KH WDUJHWHG JURXISHRUHWV XGRH DRKVN W R(Q 3OKDHQGDWD YLV
DQG WDEOHV WKUR&UWR R Q DVOIH SOKHGFZKR U Q WLRV W K B H H G L
FRKRUVV

6W X G H Q W D J H U D Q J H G W W X G E L H Q L V R Q X D O G H Q R V K H V D D B L W L
D J H G V W X G H Q W W D Z K R R D U R I O G H U
8 Q G H U U H S U H V H Q W S H G S X O D X G H R Q V F R I Q W K I E V D Q \ R I D V W X H G W I Q Q W
W K D W D U H Q R W Z K L Q H V V \$ X G B Q W R J O K G W B B E D O L W D Y L R Q E
3 H O O U H F L S L H Q R Q) W K H F R B B S L R I H G R Q V X X Q G H H Q W M S L W H V B
R Q W K H 6 (0 G D W D E U H D N G R Z Q V

8QGHUUHSUHVHQWQMG/PWQQRDQWRHXYZQWGHQWDFH HWKQ
FODVVLILFDWLRQHW\$DWDQV B B V X Z K Q R Z Q W K R U F R P S D U
ZKLWH \$VLDQ XQNQRZQHGJRXS W L K H D Q (V R G W D W D E O H V
%DVHG RQ HQUROWRKHQSDWWUHWKGVH HURFDUV DQG RYHUDO

LQYROYHPHQW ZLWXUWKEW&R/ONXIGJHQLRQG DFVSHL UHAW RVFL D V W D E
FRQQHFWLQJ DOKPFXLO W/W X/GHDQW MDGLG JR V K W/Z R UEN LSQRD Q G S
RSSRUWXQLWLHVO O KLOV/RQD WLDWVWYUR QHFW DUEHOD D WILRQ V K L S V
LQG X VWU\ DV PDQ\Q\W/&D DOX FEQIF RPYHREX M L Q FXW L R ZIQOHU D G H U
ORFDO RUJDQLJ DW WRRQ \$ URK H GJR DGRWHSR S S/SUWFWQ Y W LDH/QG F X
HPSOR\HHV PDQ\ RIOZIKRURQ D U V H DGRUE WDW Q DFLQHGHG D Q V G L DRO V W
WR KHOS WKHP DGYDQFH LQ WKHLU FDUHHUV

,QLWLDWLYHV DQG 6WUDWHJLHV
7KH &ROOHJH 5HD D E F Q H L Y H Q I I E R I O K D E R \$ F D D G H G P Z B W K U / R W K H O
WR EULQJ VWXGH QHYV QWRVFDQ S XS/GHRVFDQVSDXW LVR QXU S U B Q G Y
FODVVHV WR SRG V A Q W & L R O O U H B E V S L O D Q D V / W J R D E H G S R W K O R L W K W I
DFDGHPLF SURJUDL F V V V D Q S R H P S O R U W W D I I D Z R G J & R G O Z H J H K / R J
\$FDGHP\ VWDII WRDHO Q V W U F H W Z H H U G D P W X X D O B Q M E B L W V H F O L H G X O
IRU WKH HYHQLQJ RW B F H W R V E X L U H S U H R W S H E W R Y Z R U M / X G X U L Q J W
DEOH WR D W W H Q G F W K Y E H L V D Q G V E M B L V S S V H L Q W K L V H Y H Q W
DGXOW OHDUQHUV

7KH JUDGXDWLQJ FODVV RI ZLQO Q H Z W) R K Q Q D W L X U D \$ O P X
\$VVRFLDWLRQ (DFK JUDGXDWH UHFLHSLORRFD D D P Q I P E W K U H V K R S Q F
SODQV WR KRVP R R B H W H K U L O S G V H R W S / & R S O X I D E K B Q O J W Y H V
RSSRUWXQLW\ W W L N R Q L Q S O X P H Q \$ V \$ R M R L D H Q L M L V R I Q Q H Y P H Q V E V U V Z
SODQQHG WR FRQ W O Q X H L R E Q X V K O G S L G U H W W Z X G H I Q W A K I D Q R P O O L H

0HDVXUDEOH *RDOV
ODWULFXODWH R N V R X I G Q Q \$ F V D G H W R U W K H H L B R * R S O H W L R Q
7UDFN D W W H Q G D Q R M O W K W K I D Q R J O V F Q G U H S / K W R V G R W H D W P L
ZKLFK S R S X I O D H W L Y R H G V E D U W K E I H H Y H Q W
(QUROO DOXPQL LQ WKH \$ O X P Q L \$ V V R F L D W L R Q
,GHQWLI\ QHZ GRU R R U K S W R K V I S \$ O X P Q W \$ V V R F L D W L R Q

7DFWLF &RPPXQLW\ 2XWUHDFK

7DFWLF 'HVFULSWLRQ
,E O I D E W A S P D A G 0

5HFUXLWLQJ 6WXGHQWV

7KH ILUVW DJURV OFILS DWRHSLQ FRPPXQLWV KH R H QDQML JDDGL SQ U WR
SXUSRVH RI SURYLGH FRPPXQLW LFN WBSZDRVHKV\$0& YH DQG ZRU
VKRXOG EH D YLVLEOH WVSZKHUHQZHWEDWDFWQRYH QMUUHFJXLW VV
HQJDJH LQ ORHJHLDEXVLEOHV Y, RQWQHWHHQVQV SQSVEHQLW LQ R X

,QLWLDWLYHV DQG 6WUDWHJLHV

&ROOHJH %ULGJMVPWHD DIQ B QVZ RX S D U P D M Q L W B L I Q P H S O B \ H H V X O D
LQ WKH KLJK VFKORFDWWLRQD ZRQ N V K B S S / V) \$ R L \$ N Z / R U S W W R K H
V W X G H Q W V R Y H U F R P H N B E R W D I F R Q H R I Q H S 3 Z R F O X Q H J H H O % Q J V H V
Z L W K V W X G H Q W V V 7 K B F S X L U Y S L R W L H Q R V D W K D R W W X R G H Q W W R F H R P S O H V
H Q U R O O P H Q W V W H S W O E X W L P O W R L S W R Z E D W K P W Q M R U W X B B G F R C
O L D L V R Q V 2 W R Q R W W R X G H Q G L W F A K K H V E Z L W R W O R D H S H D U X I W X W X I G H Q W
D E R X W W K D W I X W D W H K D C K G W K I G X U B O W S B / Q \ D L W K S H O S Z L L Q J W K H

x \$ OORZ VWXGHQWV\WRIVQHRSGR&WPHVQHBGQDQG DMHVX
QHHGHG GHVLUHG
x \$ OORZ VWXGHQWVDWFRZUWIKGLRIZZOSPKSDKHH\GIHRWJOEKIFD
OLIH HYHQW SUHFQ&GHQURRORSQIWLKRQVDPH RU DQ

x 5HIRFXV RQ +HDOOWKIED UGHYHUBSIIQOVLQDYZDRDSELOHYSRJRV
 o 0DVVDJH 7KHUDES\ SURJUDP QRW RIIHUG)<
 o 0HGLFDO /DERUDWRU\ 7HFKQLFLDQ EULQJ IURP 6,&&
 o 3KDUPDF\ 7HFKQHORSQFHUWLILFDWH
 o 3KOHERWRP\ GHYHORS FHUWLILFDWH
 o 6XUJLFDO 7HFKQRORJ\ EULQJ IURP 6,&&0 WR -\$/& FD
 x 5HVHDFK DQG H[SRUWRGGRYDQFHURUQDQXGUSGGDRJ
 VWXGHQW SRSXODRMLRQXVRPDA DQFDXGH
 o \$XWRPRWLYH 7HFKQLFLDQ
 o &RQVWUXFWLRQ
 o &XVWRPHU 6HUYLEFH
 o +RVSLWDOLW\
 o ,QWHUQHW 7HFKQRORJ\
 o 0HGLFDO /DE 7HFKQLFLDQ
 o 2IILFH \$LGH

7KH &ROOHJH ZLOO VHUYH FRPPXQLW\FQHGHYVORRBRQJW DH
 &RPPXQLW\ (GXFDWKLBO WGRVHQRZDQHOIRZKVWXGHQWV WR
 VSHFLDOL]HBOFHUWUHLFDQONIRUFHQZFGXFDMMVRWR VHUYH O
 EXVLQHV DQG LQG XVWU\ QHGHV 7KUHH LGHQWLILHG H[
 x %RDW 5HSDLU
 x 59 7HFKQLFLDQ
 x 0RWRUF\FOH 7HFKQLFLDQ

7KH &ROOHJH ZLOO H[SDQG DSSUHWRIHQBORUSHFODFHHRHQ
 RSSRUWXQLWLHV
 x &UHDWH D IXOOKWSPSRD\$SDQG WLVXGIRQWSO
 x :RUN ZLWK GXDO \$UHGLS WFRWULFRWKWS DSHDISHRHOVRI

0HDVXUDEOH *RDOV
 \$W WKH HQG RI WKHFRRXUVHMDZLQKOFQHHQJIMKHBRIGDOLW\ D
 RSWLRQV GHVFULSHGHOREZYLWQGLQPHVPHODRV BIPULROOPH
 VWXGHQWV E\UWGHFHQWUWUFRDXLHFWLRQ
 x &RXUVH /FastTrack V DQG ZHHN
 x (YHQLQJV
 x :HHNHQGV
 x 0RGDOLWLHV +\)OH[
 x \$OWHUQDWLYH ORFDWLRQV
 \$W WKH HQG RI FACH QXZ DQG ULQDQYD\$UYH USPPJLQDP VD V
 LQGLFDWHG DERYHZDQGHVGHYHGH\$VHNG DQG LPSOHPH
 x 1HZ GHJUHHV
 x 1HZ FHUWLILFDWHV
 x 6WDFNDEOH FUHGHQWLDOV
 x &RPPXQLW\ WUDLQLQJ
 x 1HXURGLYHUJHQW SDWKZD\

x \$SSUHQS\$RFS\$VKULW XQLWLHV

7DFWLF 2R\$UHDERXW 6WXGHQWV ZIRW'IKI JURPHH & R

7DFWLF 'HVFULSWLRQ

7KH -\$/& GLVWUHL\$W\$KDDVDV LOROU RI ERFSGHQW\$G ZRRK\$R\$OH
QR GHJUHH 0DQ\ RO WKB\$Y\$H \$Q\$Y\$M\$R\$S\$&\$O\$D\$W\$H\$Q\$F\$H\$G \$L\$W\$K\$L
W\$K\$U\$H\$H \HDULG \$R\$W\$W\$B\$H\$Q\$G F\$U\$H\$E\$V\$H\$Q\$D\$V\$D\$H\$O\$V \$D\$\W\$K\$D\$M\$H\$U\$F\$K\$L\$D\$E\$X
W\$K\$H\ O\$D\$V\$W\$ D\$W\$W\$H\$Q\$G\$R\$H\$G\$H\$S\$/\$&\$J\$D\$D\$G\$ M\$D\$K\$R\$E\$V\$W\$V\$X\$W\$F\$X\$G\$H\$Q\$W\$O\$ E\$Q\$ K\$H\$O
V\$W\$X\$G\$H\$Q\$W\$V\$ H\$D\$V\$L\$R\$\W\$K\$H\$D\$Q\$R\$Q\$D\$W\$H\$L\$R\$H\$Q\$V\$E\$S\$U\$F\$F\$N\$Y\$E\$B\$Q\$M\$V\$R\$H\$W\$K\$H\$L\$Z\$ S\$U\$R
V\$W\$X\$G\$\

,QLWLDWLYH DQG 6WUDWHJLHV

,QVWLWXWLRQ DQG (5HWHW\$D\$U\$Y\$H\$K\$Q\$Z\$H\$V\$O\$G\$D\$Q\$W\$Q\$D\$S\$U\$H\$S\$R\$O\$R\$K\$H\$O\$R\$V\$M\$X\$G\$H
7KH LQLWLDO \$O\$W\$K\$Q\$V\$W\$X\$G\$R\$Q\$W\$W\$D\$Z\$K\$R\$R\$Z\$D\$P\$Y\$R\$U\$F\$R\$P\$S\$O\$G\$H\$W\$H\$G\$R\$X\$U\$V
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&RPPXQLFDWLRQ \$Q\$S\$M\$H\$D\$U\$W\$M\$D\$R\$K\$Q\$G\$V\$R\$E\$R\$P\$S\$O\$H\$E\$V\$H\$H\$[S\$D\$Q\$G\$H\$G\$E\$H\$V
W\$K\$U\$H\$H \HDUV\$D\$Q\$E\$R\$R\$G\$L\$G\$R\$Q\$R\$W\$X\$G\$R\$P\$S\$O\$H\$G\$H\$W\$D\$K\$R\$O\$H\$D\$V\$W

0HDVXUDEOH *RDOV

(QUROO DW OH\$D\$X\$G\$H\$Q\$W\$R\$I\$Z\$W\$W\$K\$V\$E\$D\$V\$K\$H\$P\$Q\$F\$H\$[W\$D\$W\$K\$U\$H\$H
7UDFN RXWFRP\$K\$R\$L\$R\$U\$W\$X\$W\$Q\$G\$W\$H\$Q\$W\$K\$H\$Z\$ L\$Q\$V\$W\$L\$W\$X\$W\$L\$R\$Q

*RDO ,QFUHDVH &RXUVH 5HWHQW

(QVXULQJ WKH &R\$O\$H\$Q\$H\$H\$G\$W\$R\$H\$H\$W\$V\$O\$G\$R\$M\$D\$X\$Q\$E\$H\$W\$R\$E\$Q\$W\$S\$U\$R\$Y\$L\$G\$H
U\$H\$O\$H\$Y\$D\$Q\$W\$ S\$U\$R\$J\$U\$D\$P\$R\$U\$D\$Q\$G\$L\$E\$O\$S\$R\$U\$Y\$A\$R\$K\$O\$D\$M\$P\$H\$H\$Q\$P\$K\$V\$T\$K\$H\$O\$V\$R\$Z\$R\$U
V\$W\$X\$G\$H\$Q\$W\$V\$ K\$D\$Y\$H\$R\$W\$K\$M\$D\$W\$R\$R\$V\$K\$H\$Q\$M\$H\$U\$H\$H\$G\$V\$M\$G\$I\$W\$B\$O\$U\$H\$S\$U\$H\$S\$H\$W\$L
L\$Q\$R\$U\$P\$D\$W\$L\$R\$Q\$ U\$R\$J\$D\$H\$G\$V\$Q\$W\$K\$H\$R\$W\$H\$E\$R\$S\$U\$W\$H\$U

)RU WKH SXUSRV\$H\$V\$R\$R\$X\$U\$K\$H\$6\$U\$H\$W\$E\$D\$W\$R\$G\$W\$L\$Q\$X\$B\$E\$H\$Q\$H\$G\$O\$D\$P\$H\$O
F\$R\$X\$U\$V\$H\$ W\$K\$U\$R\$X\$J\$K\$W\$W\$H\$H\$Q\$'G\$R\$S\$W\$D\$X\$G\$E\$R\$V\$W\$R\$M\$D\$G\$P\$U\$D\$Z\$D\$W\$U\$D\$W\$L\$Y\$H
L\$Q\$L\$W\$L\$D\$W\$H\$G\$ F\$R\$X\$O\$O\$H\$D\$H\$J\$D\$L\$V\$E\$R\$O\$W\$W\$R\$U\$D\$W\$H\$B\$(0)\$&R\$K\$R\$U\$W\$G\$X\$U\$L\$Q
V\$H\$P\$H\$V\$W\$H\$U\$ F\$R\$X\$U\$V\$H\$V\$D\$Q\$G\$W\$R\$G\$U\$R\$S\$H\$V\$G\$D\$Q\$G\$K\$Z\$I\$W\$K\$G\$Z\$H\$D
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X\$Q\$G\$H\$U\$H\$S\$U\$H\$V\$H\$Q\$W\$H\$G\$P\$L\$Q\$B\$U\$Q\$W\$W\$K\$V\$H\$R\$S\$O\$D\$W\$H\$U\$W\$K\$H\$F\$R\$X\$U\$V\$H
U\$D\$W\$H\$I\$R\$U\$W\$K\$H\$I\$X\$O\$O:\$K\$R\$O\$R\$U\$W\$K\$H\$D\$D\$Q\$M\$I\$Q\$F\$D\$U\$Q\$M\$R\$O\$H\$G\$W\$K\$H\$U\$X\$Q\$G\$H\$U\$U
P\$L\$Q\$R\$U\$L\$W\$\J\$U\$R\$X\$S\$V\$W\$L\$F\$O\$R\$K\$D\$E\$G\$U\$W\$K\$W\$H\$O\$B\$Z\$R\$S\$O\$H\$D\$W\$H\$L\$O\$M\$R\$U\$P\$D\$W\$L\$F
U\$H\$J\$D\$U\$G\$L\$Q\$J\$F\$R\$X\$F\$U\$D\$Q\$E\$H\$H\$W\$R\$X\$Q\$G\$L\$R\$Q\$7\$D\$E\$O\$H\$%

7KH ILYH WDFWLE\$R\$W\$H\$G\$R\$K\$W\$H\$G\$U\$M\$R\$W\$H\$P\$S\$W\$L\$R\$Q\$ L\$Q\$F\$O\$X\$G\$H

(DUO\ \$OHUWV
8SGDWHG :LWKGUDZDO 5HDVRQV
7LPHO\ DQG 7DUK\$H\$W\$K\$H\$G\$X\$J\$K\$W\$U\$H\$B\$R\$P\$P\$X\$Q\$L\$F\$D\$W\$L\$R\$Q\$V
:HHNO\ \$W\$W\$H\$Q\$G\$D\$Q\$F\$H\$7\$U\$D\$F\$N\$L\$Q\$J\$L\$Q\$'/\$D\$Q\$G\$O\$L\$G\$W\$H\$U\$P\$*U

\$IIRUGDEOH DHQ & \$XFUWHV WIDEVH ULDOV

,Q GHSWK GRV FUDFSKWW BQWLLQ LQ EDVWUQDMVH DLQH/ DQG PHDVXUD
SURYLGHG BOLOR ZLKCH ISDJHV

7DFWLF (DUO\ \$OHUWV

7DFWLF 'HVFULSWLRQ
:KLOH WKH RYHUBQQQRUR D QFRUKHDAWLEDSWV LQ FULEHV WKH QXPE
FRXUVHV DQG FULGLKAG KBZDO ODR RWUMRL W KGH S V W D R KRZV V
FHUWDLQ WLPHV IRQ W W/K QPHRQWV W DZLWZKWBZ 7DEOHV (DQG
WKH GURSV E\ ZHHWHPQIG VSRU Q ZVQ HQRM W K H EIOFR WWPYXV IRU VV
GXULQJ WKH MLRVW W KHZ R HZPHHWVHU

,Q WKH &ROOHJH TVH(53 V DQ W DHP O W W O H I O W R Z R / G I X G H O W K D W R V X
WKH\ KDYH FRQFHUQW V I H D V W G I Q Q J Y Q R H G J H U D G H V \$ G E H L K B U V Z
UHDFK RXW WR W O S V L G H V O W X G I H O W S U H F V K R O W L Q J W W K H P V I U R P V
LQ WKHLU FRXUVHV L Q S K L R J K W U Q H Q G K E L D K W K O R Z H D U O \ D O H U W V
KHOSIXO LQ LPSURV E D Q F W X E X M Q W B S H I L P S D F G L F R U Q W K K H V V L
WKH\ DUH QRW H G U R Q B Q B X R J K W % H D V & R Q I R H J P D W H B Q X W F K H G W
\$OHUW 6\ VWHP GXULQJ H P M K W H S U E L X M G W O K H J K W S O H B H Q W D W L R

,QLWLDWLYHV DQG 6WUDWHJLHV
'XULQJ WKH ILUKW G S I Z L Q D \ V R I V W Z H U W H L Q F I R X X D J H G W R L G H
VWXGHQWV ZKR GLGHQRWV WKIRZ \$ I S G I B R Q W F O R D J V Q R W F G W K H L U
K\EULG FRXUVH V) D F X O W \ Z H U H W K K I N G E M Q F R X I U D W V G L V R H U F
DQG LI QR UHVSQRVH ZDV UHFHL'OH G \$ / & X E P L W H D Q W L H R Q Q W A D E O
ZRUNVKRS ZLWK LQ R W G R X F W K I L R Q Z D R O S K I R Y L O S M G F R R U D F X O W \ T
VWXGHQW TV SULPDU\ DGYLVRU WK B Q D D S C H U R V R W D E G H F W R L O H S D K
WR DVVLVW LQ Q W Y L I D O W G Q J D V O L B S R O V H S H U S R Q D D E R E H V W K H
ZHUH FOHDUHG D O R G W W I K H H G Q L W U K F D V R O D \$ I G I B W L B R Q Q E D D H P H Q V
UHSRUW WKURXJKHG' W K K D G V H Q G W H Q Z A R L Q D V G R Q H Y R I W I O R G J O R W
VLQFH WKH VW D H P W V R W H V K H F K V S V H L Q L O V G H Q Q V F Z F U R K H I D H G W
VWDUW S D U L W L K S H L W L F R R Q V H W S R V V L E O H

:KLOH D FRPSOHWSH D Q D O \ V I G U R S V L Q Q G Q Z I R P S G U H W Z D O D Q L Q L
RI WKH GDWD VKRZ VG W K H D W H W K H H U L R I Z K V R S M U F K I Q W D R J F F X U U H
RI ZHHN EHWZHHQ WSKUL Q D O O V H I D O R G W O H D W L Y K H S H U F H Q W D J
WKDW RFFXUUHG ERW W K H K H Q I G O R Z H M H P I H R W W K H Z W R W D O D I
GURSV DQG ZLWKGG D Z I D D W W K H P W W F H X W B Z H W S U L Q J

2QFH - &RPPXQLF D O H L R Z H L Z R D Y O G L O D H V R R O O R Z L O B S G R D W W L Y
x 2XWUHDFK WR ERWK RQOLQHP VLXóð€p`0PÀ 2€D R P p À @
GUWHPöW R@XFWLR\ DQA KRZ WR FRPSO

x ([SDQG RXWUHDFK ER\ R Q 60³ QCRHVCRZVH VDCGHVH QH[FVH VMWF
WKURXJKRXW SVKUHVV R P M W W W W F
x &UHDWH D³ WHP SDFXOW\HWB LVD YIR HWL WVK QKEQ VP QOWGSV
FRQWDFWHG HDUO\ LQ WKH VHPHVWHU
x &OHDU FRPPXQLFDWLRQ\WEDWZDHCQ WDKSBRVSR DFWRUH
UHVSQRGLQJ WR HDUO\ DOHUWV
x ,GHQWLI\ WRROV DQGLRQO\ORZ XSVMMWUDDP FIRIRSHW DEWWYZH
IDFXOW\ DGPLQLVWUDWRUV DQG VXSSRUW VWDII

0HDXUDEOH *RDOV
5HGXFH WKH QXPEHU R D IO V G X L G H U W O L Q K I R K K E U L H G Q F R V X O R J
' / E\ WKH HQGG RGDWRH WKHUVHPHVWHU
5HGXFH WKH QXPE R R R G R V Q R G H J D W M H Q L G U F V D Z H H Q X R I L W K I
5HGXFH WKH QXPE KIGURIZ DRXUDV GZD OW XSGULG V G W I R V K G U K H
VHPHVWHU

7DFWLF :LWKRBEHVDZDQGG 5HDVRQV

7DFWLF 'HVFULSWLRQ
\$GPLVVLRQV DQG 5HFRUGV UHF R X G U B H D D V Z Q W R G U D Z X G H Q W V
ZLWKGUDZ IURP GGDWLRQV WVKH ,F X H D Y R O W Z E M K G R U D D G H T X D
VWXGHQW EDUULHULW KGGD Z D Q V F R X H U H R Z U B M K H U J E R R G F I
'XULQJ ILVFDO \HDUVRI VWXGHQW ZLWKGUDZ DOH IWH B D Q N Z
YDVW PDMRULW\ RZHUHSRRW KIGUJFRFRV B X V H D F N X R I G D W D U
VWXGHQW ZLWKGUDZDORW VEKH LQR V G E L V S Q H P Z H R V X B U H F U H W
VWUDWHJLHV WKDFH P D I X L Q F B M D V M H R P S W H I W L R Q H D F K

,QLWLDWLYH DQG 6WUDWHJLHV
7KH &ROOHJH SODQW KGR DXSDG S H R V R K H Z L D Q G W D Z D R D V R Q J
HQVXULQJ D UHVRQ LV UHF R U G H Q G 7 G H G R Q B W J E D V I R Q V Z E O
VWXGHQWV IDFH F X K F G J B V L Q D F F N L V G R D U S H R U V R D W L R I Q D Q G X C
ILQDQFLDO KDUG ZKIOS ZKHU R V B H L W D F N U D Z D O R I Q D F K R V H P H V
GHWHUPLQH QHZ FRW H V I H H V H W K F D Q W L R Q F D W V H W K R V W W X I G H Q W

7KH QHZ ZLWKGUDZDORV G H I G V Z L W K D Q U W K I Q V R 6 D N J V W V H F X D Q G
UHFRUGHG XSRQ HDFK ZLWKGUDZDO UHTXHVW 7KH QHZ UH

- x \$GPLQLVWUDWLYH ZLWKGUDZDO
- x &KDQJH LQ VWXGHQW V ZRUN VFKHGXOH
- x 7UDQVSRUWDWLRQ LVVXH
- x &RXUVH PDWHULHQW RWR FD D G L Y D J F R X U V H
- x 3HUVRQDO LOO GHVELOLWDXLQJRFRQGLWLRQ
- x &KLOGFDUH LVVXH
- x 5HVSQRVLEOH IRW R Q F X W H I G R I D P L L F O R I R I D P E B U P B P D M U K
- x 5HORFDWLQJ RXW RI WKH DUHD
- x)LQDQFLDO KDUGVKLS
- x ,QVWUXFWRU LVVXH

x)DPLO\ PHPEHU RU VHOI FDOOHG WR DFWLYH GXW\
x 'LVFLSOLQDU\ ZLWKGUDZDO
x 'LG QRW VSHFLI\ RWKHU JRRG FDXVH

7KH DERYH UHHD VROGV ZLWVH WKHV RQVORQHRSR XQGHU VRUPV
3ROLFLHV DQG , Q\$RUPD WILRQVRDQV KSHFRHU GY EZHLESDHIG WKH
VHQW GLUHFWOQOV B\$FRPLG/W LRQ VSORFHQW VILHJXH,V VDVVWR ZLW
FRXUVH LQ SHUVROQILVORHRXW XIG KOPAS DZLORQIR WFO G V\$HFRUGV F
\$GYLVHPHQW DQG USHFRHUGWKKHZ UVVHSDVFRZD QVQO ISRUHV FZDQQH
LQWR WKH GRFXPHQW PPDQGH HPMQHLVWVXQVHLQMFIDWX Q QT QXPEH

0HDXUDEOH *RDOV

7KH &ROOHJH SODUQV M RV KIH FORUZG ZIDVQ VHI P ZIDV QIGW W D Q GH FR
WR SDVW ILVFDO \HPDULQ JRDO L VQVREUHUHGRIF H HVSRIW WHG E
3RWKHU JRRG FDXVHU DZXDOL Q U RFKIHV WIKV KI WKH VHOQ FEFOH
LV IRU QR PRBHWHISRO WRIG DUCHD VQ VFR FDKVH/JR ULHV

7DFWLF 7LPHO\ XQGH FDEK HWKHGR ZJK Q &RPPXQLF

7DFWLF 'HVFULSWLRQ

:LWK WKH FXUUHQW UFRVPH KLGLV IDWLVVHGV &RQDQD JODQ GHFRV V D J
WR DOO VWXGH QWVLR QXF ERDXW LWQRORLQ GRXH JGDVGH D WDRQ
HYHQWV HWF 7QLWVXGVH QWV XLOHFWGH YW Q JUHE D UGV QDQV D VNV
DOUHDG\ FRPSOHWHG VQ GWRIH FG R7DGRW FDXSSH QWV VORVSDH QW I
WR WKH LQIRUPD VORHQ GHHS V URXPHV G VWHIRDM V VFXIG IDQOWDU JH DF
FRUUHVSRQGQH FH OTHR DVELFF RIRHQ SDVQQR QRAHJPHQWVD WK
LQIRUPDWLRQ ZH GHHWVRUYMQJG W Q VNU R VLVH DQ W HGVHLMV ILFDQ
EXW LW DSSHU V WDFE KE HV H G QHW BFRDXWV WSRGQHCHWWR / B R W U H D
SD\PHQW GXH GDWHV FODVV DWWIHQSGDQFGH R Q Q G DIEDIGMIP M
VWXGHQWV LQ FRQVQLRHXQ Q JDMQIGHV RIRH G M B Z R U N L Q W K H L U

,QLWLDWLYH DQG 6WUDWHJLHV

\$FRPPXQLFDWLRQM WLVVHXPJ ID YDKLD BRFODJCH G53 V&R VPHXQLF
ZLOO DOORZ XV WLRQ XLOFNON DDFKGBRHXSWR R V \$ WFXGH Q W V WR S
FDPSXV SURJUDPPL QJL RQ G HJHDXDLSQD ERD VORWLRQ FODVV
SDUWLFLSDWL RQP \$XVL QIHJDRVLURFH FIDHWLRQ-ZI&RQFDXQLR DOOR
WR GHYHORS ZULWWHRS D B PAVQ WFR VVLRQWQLFDG VHP LP SRQJ 6
\$IIDLUV GDWHV D QHP SODVGH QV QZH Q OQIKHURW KHRIXVWVXGHDF Q W DV
ZLOO QRW KUHJX QVDRU GURDHUHFVKS RIRHSHNDV HLUWRLV VHQW RXW

&ROOHJH VWDII L Q D G IDQGV &ROOHJHSDWVGH QVQVOWVSDUHD ILFQ KRZ
EHVW XWLOLJH WKH V\VVHP 'HFILQJRZQR VADLO D FQHM G WR V
ZKDW FRPPXQLFDWR REQ JURXIS E/OQ M K B G W B R EP ZIQD WDWLSHQ DU
SULRULW\ IRU LPSORPHQ Q W DWRL RDSY G VWHK HG X ULVQH PWLQH
DFDGHPLF \H DU

0HDVXUDEOH *RDOV

)XOO LPSOHPHQW D ZFHNLCHSRW WHQG DQVWHP LQ ' /
7UDFN WKH UHDSIRIWHG UFRW FXICQJ D VWRB QQU ET XHKHWLW XGH
5HGXFH WKH QXZLEWHKUG R D Z DQXG H QW W X I J K R X W W K H V H P
5HGXFH WKH QXZLEWHKUG R D Z DQXG H QW W X I J K R X W W K H V H P

7DFWLF ,PSOHPHQW D ZFHNLCHSRW WHQG DQVWHP LQ ' /
0LGWHUP *UDGHV

7DFWLF 'HVFULSWLRQ
7KH &ROOHJH UHFURJDLG WWDW XHIGM B H PLYOHHVQF W Q W LQL UH
UHTXLULQJ UHJXODU VDWXGHHQGDVQVHGLURPDWLRQ D WK WK HL VL Q V SH
DZDUGLQJ IHGHUDDGIL Q D Q FLH DOP EX B QHPW B VG R D XOFFK Q W W L W X G
DWWHQGDQFH D QRGX SRUXWL FVLSH W B X Q W M K R \$ G D L F W L R H Q F H O \ Z I
RQ UHWHQWLRQ QV RV W P X S F L Q W D Q W W H B Q V B S R O H F W R H I F Z D U G L Q
JUDGHV DW PLGWHUP W R Q I D B X Q W U D D B C H G W H U P O H W W H U

,QLWLDWLYHV DQG 6WUDWHJLHV
*LYHQ WKH QHHG IRU WKH LQVWLQFXIWLIRQRW B VP DLWQ W D L F Q I D V
ZHHNO\ DWWHQGDPSOH PHHS W H V L I R Q D H D R X E V H H G L W H E I N D U L D W W
WKDW LV VWRUH G U L G W B Q V K W U B R O N O H H S (S B Y L G W W W R H G D W
DFFXUDWHO\ UHSRUW VWXGHQW D W O V H L C C D C F L H D O D G S D Q G L
UHSRUWV 7KLV ZLOO DOVR DLGQV K P D Q B D O V R J H I Q I S R X G W W V

5HTXLULQJ PLGWHUP OOSWRWHLG H U D G H O H Q S V F D V R X F K R F Q R Z W
GRLQJ LQ HDFK FRXUVH 7KLV IHNGE Q GNV Z L D O D V R Q R H Z F R J W L Q
FRQFHUQLQJ JUDGHV D Q B K H G B L G S R W M Q W B W W K H H Q W H P I D Q W
WXWRULQJ ZRUN Z I H W K I D V K D W U S B O R G H D F H W B W L P S K H R Y H W K H
VWDQGLQJ S I Q I R B I W R K W K H H U P

0HDVXUDEOH *RDOV

,PSOHPHQW D ZFHNLCHSRW WHQG DQVWHP LQ ' /
\$QDO\JH WKH GDWDS DRVWLGGIGDEQ FZHNLCHSRW WHQG DQVWHP LQ ' /
ZLWKGUDZ SDWWHVU X G W R Q W M V D Q S U V X M H R W W L R H W O \ L Q
7UDFN GDWD RI VWRXGLHQRU V Q F F L P S V I R G W P H H Q W W R I L R Q D O J U I
VWXGHQWV

7DFWLF \$IIRUGDEOH DQG \$FFHVVLEOH &RXUVH C

7DFWLF 'HVFULSWLRQ
6WXGHQWV IDFH P X Q W F I R S P S H I F W D Q G H C H U H W L H I V D R H E V H B R P H F D
WUDQVIHU UH D G \ Z I H W & R O D G B H D D R I E R W A K X U L W X L G H V Q D V S R S X C

RXU GLVWULFW D Q L G H W K K I H Q F R H G W W B D F R Q H P X L P H G M R L V X F F H V
FRPSOHWH FORDXW HWK WIKU RIGJF DWLRQ

,QLWLDWLYHV DQG 6WUDWHJLHV
7KH &ROOHJH UHYUHZ PIGQV KHPEIRRN WQBU BSW B DWLSVQLR BR ZI
SURLYLGH FRXUWHX B B W W V L DRQV DVQRK IR IQ HFDP SVXU HRY HUD W V \$
3URSRVDO 5)3 Q DLQ G/LSUW L Q U E X W HRRJ S F W R I Q F R X D O G Y H U G L G H
WH[WERRN DQG FRXUWHX \ P I B W H F U L X U O W \ G H P S O P S M L R Q L Z R Q F F
WR VWXGH Q W D Q H I D D V H D R G I P X R H S D X F D Q W U D Q G F R X U V H P D W H U
DYDLODEOH WR WW G G H G W F O E D V W H M & R L O U K I J H X O W Z R D W H O \ F I
(&DPSXV ZLWK I X O V L R Q S S O H P Q H G I R U - X O \

7KHVH DUH WKHFELSSDVEHLO WKLURX JIQ VEDPSXW BQG W X G H Q W V
x \$ELOLW\ WR PLQLPLRHU VFXGM Q P D F R J W L D O V E \ R I I H U
o PD[LPXP XVH RI XVH G W D O \ W E R R R R R N V G X V W R P O S W H Q V
RSWLRQV SULQG BSHQH(PDXFD WLRQ 5HVRXUFHV
o SULFH PDWFKLQJ FDSDELOLWLHV
o IUHH VKLSSLQJ R X S R I Q W X Q R W G H U D O J F R K O L V H P D W H U L
o LQQRYDWLYH WHFKQRORJLHV
o WUDQVSDUHQF\ ZLWK SULFLQJ GHUHSRPLWIDQWL W G F D Q G
x \$OORZ WKH HDV\ X G H R I D I L S D D R I F Q D O V B H V P R V G U R D O F R X \
o VHFHUHO\ LQWHJUDQW L Q B L Z L O W B L G D F P S W M H P W U B Q V I K W R R
VWXGHQWL G Q B Q F L B O L D H O F S X W F K D V H V
o LQQRYDWLYH DSSURDFK DLB XDWLQ JS DL Q B I Q W P H W K R G
x (QVXUH FRXUVH P D W E I O H D W R V D W H G D Y O M V F O E D W W K H D I E K W W H U
o DFWLYHO\ Z R O W N \ Z V R V D F D X K U H E R R N P D Q G B W L R Q V L Q D
o RIIHULQJ D XVHUG B S M Q G Q \ V F R X O W M K D R V Y D G O R F R X U D F X
PDWHULDO FRHFWWL B Q L R X U W G J W M K O H D G R S W L R Q S U R F H Y
o RUGHULQJ FRXUVH PDWHULDOV DW OH

LQIRUPDWLRQ UHJHDLVGLQD GAKDHW & FQVQJH DW HQ SQRBJWKVWDR L
LV SURYLGHG LQ *RDO

6WXGHQW SHUVLVWHFQ QWILQXPHGM SHUHQDOPWQWWKHF SWKQJ V
2YHU WKH ODVW WKUWKHDFYDGHDPJSH UNDOVWHRQ F SULLQWH IRU W
FRKRUW ZDV 7KWKVZVKH URRXZHWZM OFYH URUJHW S HIUWKVHH V
ZHUH XQGHUUHSUWXISQVWQ PLQRUDLQGVWQXGHQWV 7DEO
VKRZV WKH FRPSOHWH SHUVLVWHQFH GDWD

)DOO WR IDOO QNWHGQHWLURDQDFHQRVWLRP RQRHWQHQNHW DQG
PHDVXUHPHQWV UHSHFWLQ QHGHU DORFDQ EVK RKHUVLQ VWIHWKLU
DYHUDJH UHWRUWLKPHQHWUW QZDVWZR VDKPH JURXSV

x 6WUHV V DQG \$Q[LHW\
x 'HSUHV VLRQ
x)DPLO\ RRQV KDS WLVVXH V
x 6KRUV ± DQG ORQJ WHUP JRDO VHWWLQJ
x 6XLFLGH SUHYHQWLRQ DQG DZDUHQHV UHVRXUFHV

,Q DGGLWLRQ WR DWKH XWHWYQ FHOXZKQJ WVG XWLFH RLDHV RI
GHSDUWPHQW

x *URXS WKHUDS\ VHV VLNQV DQGWLRQV SCWQZWW D\ORO RZ Q/Q H
HDFK RWKHU DQG GLVFXVV WKHLU H[SHULHQFH V
x 5HOD[DWLRQ /RXQJH VLVQ 8HVQVGHQ WTSXLFH V S\DXFHVQ W VG IDV
EHWZHHQ FODVVHV
x ([SDQVLRQ RI WKH &RXQVHOLQJ RIILFH

0HDXUDEOH *RDOV
&RPSOHWLRQV RSHQV DHDWLRQH/RXQJH
&RQWLQXH WUDFNLSQVLRQJ QXPSHUW DQG GWRSLEGHQWLIV
DUHDV WKDW QHHG DGGLWLRQDO VXSSRUW
7UDFN VWXGHQW XVDJH RI WKH 5HOD[DWLRQ /RXQJH

7DFWLF 2XV XHDFIQW 6WXGHQWV 1RPH V\QURJO O HG

7DFWLF 'HVFULSWLRQ
(DFK VHPHVWHU WZKR HDH H XFFXG WQVQD UFRRS OVMZR UN E
WDNH WKH VWHSRUHQ\ QH W H VLVVWU UZDKW QVWU HJLVWH
OLNHO\ IRU WKHP LVRV H VSKDWH S FHYUHQVQVQKHIPQI WRKH HQH[W V
DV D ODFN RI DYDHOV EOHPIFRWRV DQJ ZQW N FVFKG GFDUHV DQG
VHFXUH IXQGLQJ WRHP RYMUH W EHOQ QM[KH BHPZHUH VWLOO
ZKR ZHUH HQUROCHLH LQRMDQDGDG XDGGLQJ DQDQV WDW CHQURO
VSULQJ VHPHVWHU

,QLWLDWLYH DQG 6WUDWHJLHV
7R HQFRXUDJH VWXIRHQWV W H V QH W FVH V WWHUI \$GOQ GHYH
FRPPXQLFDWLRQ WHP B D XQLF DAKUROV HJLQV URDWLZQ RS
EHIRUH WKH HQG QG W KJK W KPHQW MUVDPHV 6PD R -p 0

21 WKH VWXGKIQPWXJKGHIQWFIWHSVNBWVQUR00 JRDLO WKH I
VHPHVWHU GXULQJ WKH DFBIHWPBF \HG XULZQJ WHDRD
DQG WKUHH RI WKHV6ZCH3WDDQJEMFBXWHUDDFK WR WKHV

7KH ILQDO LQLW WDXWLRYL QWR LSURRFRMM W LDQW B D P S W H J Q P D R P D
DZDUH RI WXWRU Q Q R XU DWYHL FKHV D QGZ KHQH Q HDVGH G W B Q R P R W
VHU YLFHV LQ D SRV S M I X O H O L Q I F W R Z L V M D X G H H Q Q X P Z E K I R J D F F H V V
VHU YLFHV 6WXG H & Q W O D H W R I O D H V F H D U M S W W R R I Q F D P S X V W X W R U I
W K D W D W K O H W H W X U M R J X L O Q J U D H Q W R X U W B D H K R H O K S H W R W Q G H Q W V

0HDVXUDEOH *RDOV
&RPSDUH GDWD WR XGH W H W R I H Q # 1 5 L & R A G K H L R C E F H U H B V H V W X I G H Q V
UHTXHVW D WXWRU
7UDFN WKH XVH RWR R Q B H Q L H D Q G W F E H H Q J W W H G H Q W V L F D H \$ O V
VWXGHQWV WR H G V P X H U H W W Q H W K M R U W H G V R I V W X G H Q W V
&RPSDUH GDWD WKR W B H . D S S A K H Q 3 K M L D I W O Y I H Q / L Q J F U M X F E Q J
QXPEHU RI VWXGHQW WXWRUV
7UDFN GDWD W R W G H P D U M H K M L Q D U F J P S I D Q J Q D W G H W L U K O L X W
VHU YLFHV O H D G X W W R J L P Q J M H X U M L F R H W W R Q G V X R H W D D F X U Y M X G
D E R X W X W L O L J L Q J V H U Y L F H V

7DFWLF , P S O R I P B W W G H W R Q B O D Q V D Q G 3 D W K Z D \ V

7DFWLF 'HVFULSWLRQ
)RU VWXGHQWV WR ILQG WKH EH V Q W - \$ U H D W D G H P G F Q S U R J U D
WRZDUGV WKHLU DFDGHPLF JRDON WKKHP \$UXVRU EWRDUE O J L W M
XQGHUVDWQG WKHPX N T X L X G I R L O D W W R W R Q D B X I D W I F R & B Q H D Q G
UHTXLUHPHQWV H Q S O R J A R S O W L R Q G B O O F A R L Z Y B U R S W L R F Q X U V H
LQWR WKHLU D E D F U H P L W S R O X D W B D W O L D Y D N V B R Q W R F R Q W L Q X
JUDGXDWLRQ 7 R Q D E H V L L Q J W D E X O K G M B W O K B E D G H P K F & B D O H J H I
G H Y H O R S L Q J D G Y L D Q G J S Z R U K Z D K H G A R F X P H Q W V

,QLWLDWLYHV DQG 6WUDWHJLHV
6HYHQ FROOHJH DQGDYDUEHHHQ S E R V H K A D S V D E G R R O V W X G H Q W V
FKRLFHV UHJDUGL Q D U G X D F O R G O H G H W E F D X W R I W H D F Q X W R H V W R -
SURJUDPV \$ O O S U R F S G F E W L Q H I L W W X G B R Q W K H I S S U R K Y Z D G H D Y D
LQIRUPDWLRQ LQFOXGLQJ

- x 'HJUHH RSWLRQ Q \$ W D R I M L D Q M H Z I L W G H V U H R I Q V D I O U ' R X F J W R 3 J U D R O
- x \$UWLFXODWLRQ D J O H D F P W I Q W H V E F X W Z U H H Q Q V S W & V D X M G L R Q H V D
- x &DUHHU RSWLRQ R U D Q G R W D H O D L U H L O G V

3DWKZD\V KDYH EWKE FRUHORVZHQ JRSUSRJUDDPV UBXSW BIQG 0
%XVLQHVV (GXFDHQFRQ +GIRUPD V B E R Z Q D T C H F K B R O R B \ 6 D I H W \
ODWK DQG (QJLQHHLQJ \$ 3') R I K H D F B S B W K Z D O F H D J H E S H D R X
ZHESDJH ORYLQJ IRUZDUG WKH 3 S B W R K Z D W W R K I D W H Z Z L O O H F
LQFRUSRUDWH HYHU\ - \$ / & SURJUDP W R H D S B W K Z Z L W K L D F O D B
SURJUDP LQIRUPDWLRQ

,Q DGGLWLRQ WR \$D W K ZDWL O V K Z H R D O G W R S F R P Y S D B O O R I V
:R U N V K H H W V D Y D L O D E F G H Z W K N V R K H J K W G E Z L S G P E M V X L R Q O L D Q G
\$ G Y L V H P H Q W V W D I I W R F R P S O H W H H Q F F X W D R W V H G H Z K U L F F K D X H G T
D U H X Q I X O I L O O H G I R U G L I I H U H Q W S D

7DFWLF 5HPRYH HLLQD QRL DQJ U%DU & RUP S G XIDWL RQQD

7DFWLF 'HVFULSWLRQ

7KH &ROOHJH UHFRQGHJRM WKKHGHRSDUWQDIFHEVHCJQWQDOV I
IXWXUH HPSOR\PHQVDW XFKPHHVM/DXRLDQVHI &RR GRFXPHQW VX
FRPSOHWLRQ VWDVGLVQWV 8BBQLWVLEIDUUFKIDQRQWKMRSPH VV
DSSO\ WR WHFRIBS@HWK+GRGHFJHUHWQMHIDQDWDIV WRKHPH HPHUJHG

+LVWRULFDQO\ FVRIOH&RVD@JDI KDBBSVQVXG W/QW/Q ZKHQ WKH\
JUDGXDWH :KLOHM/KN QURDG X@ZVWVQCKVLDWQKLV ZDSHDEEDUU
SUHYHQWHG VRPHS\$VXLGHQWRV JIWR@XDRWH SLSRUFLLDF/DIOO WKH
7HFKQRORJLHV GHSDHUMPHIQSARURW MRK@R@V@DQVX@HRQSDA@KH
QRW QHHG WKH DZVU@LHG@VGH JVRHJ:RLLD@H@PUSKOLRA PPHQVEH WUXH
LPPHGLDWHCFRIRSD@R@ZILRQ RI WKHILQIFRLXVVRIZRVWVXGLHQVW DV
HDUQHGH FUGHGHQWLDLQVDQRWUDGQRH@V@H@V@UIRU IXWX

\$GGLWLRQDOO\ WQDQVDHLO WVRX@S@S@M@R@HYLQDQGX@MLGR QRV
DVVRFLDWH GHJUHH SRVWHG WRQEFKDF/FIS@HGH@RV@W@V@D@Q@
DV WKH\ WUDQVWLUW@W@VRQD/Q@UH@H@S@R@W@K@L@N@H@R@X@RV@B@Z@R@U@N@D@
ZKHQ WKH\ IDG@Q@J@W@K@H@DX@O-\$/&

7KH ILQDO LVVXHD@X@V@L@R@@D@S@&@V@L@V@K@H@L@R@D@I@H@H@L@Z@D@W@K@D@G@G@H@G@
VWXGHQW@V@%X@U@V@D@G@B@F@R@R@X@Q@W@H@U@V@L@V@Q@H@B@U@W@B@D@D@D@G@R@V@K@H@U@F@
EHHQ SDLG 7KLVKDMGQW@S@D@V@V@X@G@H@Q@V@E@D@Q@D@Q@X@G@M@G@W@V@W@J@R@D@G@X@
DQG FRXOG FDXV@H@G@H@Q@D@O@V@G@L@H@J@U@P@H@L@D@Q@G@W@U@D@Q@V@F@U@L@S@W@V@

,QLWLDWLYHV DQG 6WUDWHJLHV
*LYHQ WKH LVVXH@J@F@D@X@M@H@D@G@&@D@V@K@B@R@J@V@K@H@I@E@R@P@Y@S@H@Q@K@H@G@J@W@Q@H@U@D@V@
IHH WKH &ROOHJH@U@H@P@R@Y@U@Q@U@Q@V@H@G@Z@V@W@E@L@C@R@W@K@V@&@E@M@Q@V@L@Q@W@H@U@H@
LQYROYHG 6WDUW@L@Q@J@O@X@H@J@H@Z@L@O@Q@J@H@R@D@O@R@U@D@J@G@O@L@F@R@M@L@R@D@S@S@H@

0HDVXUDEOH *RDO V
&RPSDUH WKH QX@F@E@H@R@R@I@F@&@H@D@V@L@H@H@G@H@D@H@E@S@I@B@U@W@H@U@WKH@U@H@P@
JUDGXDWLRQ DSSOLF@D@W@L@R@Q@I@H@H@
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,QLWLDWLYHV DQG 6WUDWHJLHV
,Q UHFHQW \HDU DG XW W H RFR VW JDI Q KD UKDQ/WLQ F UHNDXGHGQ WV ZK
LQ WKH FHUHRQ \SDXWH KUDMTH WUKHGLWRPDSVK HD G B RNRZWR UIH RQ
D FRVW RI DSSUR[ERD W HFOXVW ETK SVDL GS IZKNH Q S/ W X G H Q UHJD
SULRU WR WKH FKHDPBQR YFIQH WFRUWVW KOL SL QDLQ P D QO VW XGHQ
VXFK SUHYHQW X G R Q W R II URKPH S E URMQFIFLSPHVMQV VIRQDFRPU WKH
&ROOHJH LV UHYLIGZLQQJURHSQMLRQJQUHWHGIXDR VLQ FDX G LV WXGH
ZRXOG EH FRYHUHG G G \RIU QMFOKRLDDUQK GSD G R URURXJK WKH
)RXQGDWLRQ WR FRYHU WKH FRVW MF WKIG DR Q HZ JFR KSDVQD OV
WH[WERRNV IRU V D X G H Q D V R H D Y G B H S D K H R R S V D L R Q V IRU JUDGD
7KH &ROOHJH V S F O U N D E V R H V R I Q G E M O M P S G I S P H R U WR WKH VSU
JUDGDWLRQ FHUHRQ\

0HDVXUDEOH *RDOV
,PSOHPHQW H D QIHZU G B E R O U H V R S X G I R Q W H V U M R D S O L D F W D R S D U W L
WKH FRPPHQFHPHQW FHUHRQ\
&RPSDUH FRP F H I Q F H P R I Q Q V S O L W X I P E L S D W B R D H H F K D S O H P H Q W H

7DFWLF (QVXUH BRUX \$GQWOL\$E\$OH &UHGHQWLD

7DFWLF 'HVFULSWLRQ
,Q PDQ\ RI WKH \$ S \$ O S E B J U D P I G Q R V O W K H & W Q G H D Q V Q V P F X D Q L S O
GHJUHHV DQG RXJGHQWML RIFADHGH QDLG WUHRG H D Q W C H D O R U W E O H I D R U
JLYHQ WKHLU FRPSOGSHIFGIERXO V W Z R O X G B Q D V H D R U H G R Q R W
WKURXJK ZLWK DSSO\LQJ IRU VWUDFHN SEGRH UDFHWWWIKL F W W W K H E
ZKLOH WKH\ DUH FRPSOHWLQJ WKHLU GHJUHH

,QLWLDWLYHV DQG 6WUDWHJLHV
7R HQFRXUDJH VWXIDG G W M F H R Y H S S H O O V B I D Q V L E S C H P L F W M L R Q V D
ZLOO SDUW Q H H G Z W K K S R S R H J Q V D E H D W W X V Z H Q U H V R I D O O G H J U
FHUWLILFDWHV W K I F H D Y H H H O I L O H E R O U K H M R R O V O K D W U H W X G H Q W V
DZDUGHG WKH FUNGRIQWLVDQW W K M D I O S S O Z O U H K B W D W O R S W L
LPSDFW WKHLU IXWXUH FDUHHU HPSOR\PHQW

ORUHRYHU WKH JWDB QDKVLRVHHS S B S E I D M F H U D F F X U D W H V W X
LQIRUPDWLRQ , Q V Z K I H S D W W H G W W R G I H L G O G H J O F M K M D L V S F B W H W
ZLVKHG WR UHFHDQ MZXVL Q D D Q W K R U M L V Z E D V D S U R H E G B R D V W X G
QRW NQRZ WKH Q D D G R Z M K H I X Q G Z H D F U H H R L M K E V P H Q W K D W W
RIIHUHG 7KH XSGDWHG DSSOLFDIWE B Q H Q R S V O L L R Q W D O G G V G H X
VHOHFW DOO W K X D W D S S O D S S I O H L F J M W L R R D S S O R Z S R U W B X G J U Q H V
\$\$ \$6 \$(6 \$)\$ \$\$6 D O Q G X S 6 W R I L Y H Q F H L O V O L I Q F D R X M V V Z K H H D S

:KHQ DSSO\LQJ IRU D W K L M L Z W X O Z D U G V R I Q H T X Q G H 5 \$ G R U G V V
D G H J U H H H Y D O X I R W L R D F W R D Z D U X G V S O M G K R O W Y K P V K H Q R W P H H W
U H T X L U H P H Q W V I R P D D O H B Z D U G G O V R W D I G I G L D Z D U G V D I W H U U H D
D U H R Q O \ D I H Z F R X U V H V D Z D \

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&RPSDUH GDWD V R V G F U H D W K H L L H D L V G U R S U L F H G W L U L F F D W H V
S D U W L F X O D U O \ K O R V K R J \$ S S O I D H B I 7 M K H & R O O H J H

7DFWLF , P S O H P H Q W H G U D G X D W W L R Q 6 X U Y H \

7DFWLF 'HVFULSWLRQ

-\$/& LPSOHPHQWHG YH*UDVG S D W W R R I V X X G S I Q R F H D S S B U L Q J I F
J U D G X D W L R Q L Q 2 F H V R V E H R U W K H 7 K Q L W R R D O W K H V H L Q Z B U P D W L F
V W X G H Q W V Q H D U R W U K D P H R Q G W R X X G K B O M R S U H W R W K L V W K H & R O
G D W D R Q V W X G H G W W R D W [L W K H M K S B H S D M Q D W X W X B Q H 7 B M N H G T
D E R X W I X W X U H H G H P S O R L R S O R O W S O B D O V G V D W X L G H D F W L R Q 8 S R Q
W K H P X O W L S D J H W H X U P L H G W W E D W L R Q Q \ Z R I U W K Q R W X B M W H V V D
F R X O G E H H O L P L Q D W H H G P V I R Q F I G H D M U H R D R Q V R X G H C H W W X U S G G L W
Z K L O H W K H G D W F W K G W E Q F I Q F R O D W H K D M G Q B W J X B D Q O D R U X V
P D N H F R Q W L Q X R X R B R S U R R Y O H P L Q W V D V G S U R F H G X U H V

,QLWLDWLYHV DQG 6WUDWHJLHV

8SRQ UHYLHZLQJ W W H L R Q J I 6 J L L Q Y H O * L U D Q X I D V G H W P H J F R L Q M K H T X
Z H U H Q R W Q H F H V H P U R Y D I G G 4 F R X O V G L L R E G H U S H O L D W H G Y M B D J J H G
W U D Q V I H U L Q V W L G V E W E L R Q V Z I H W K H U B R B O F F J H V D O U R H D V K L K G D W
6 W X G H Q W , Q I R H P D D V L G R Q 1 6 H V 1 D W L R Q D I O T J V 6 X G X H G Q M Q V & O H U D U F I N Q U

,Q WKH XSGDWHG VHXUHYBIGGTHXG V W S D O M I Z F W S D W W R G H L Q W H [W U
D F W L Y L W L H V H D Q Q / D F W O Q H Q J H D Q S R Q D R O U D H G J H I Y E H R G W R I 7 K H M H D U Y
V K R Z V V W X G H Q W V L Z K R W D F R Q Y F D P S S O Y U M L H E F R V X F F O H L W H I X O L Q
F R X U V H Z R U N D Q G J U D G X D W H \$ G G L O X D E V C H I G D W X H V M J L R Q G / L Z
L P S D F W R I V W S O G M I Q R V S L Q U M [L W F U D E & U H Y L F Q V D U I R D U F W R K Q V S L H R J
V W X G H Q W V \$ G G L W L R Q D O V D W L V O D X F G L L R Q J Q W T K U H H W B S G Q Z I Q U G H
W R D O O R Z V W X G H Q W V R V D F S U R Q M V O K H I O D E H H P S W H S / & 7 K H S O D Q
L P S O H P H Q W W K R U Q B I S V O L L F Y D Q W V R Q - X O \

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&RPSDUH UHVSRCQGH G I D M D P E R Q W L W H E R G H Z I V W U Y H \ W R F K H F
E H W W H U U H V S R Q V G I U D I G E D F N Q V R H P S H O V B I S H Q / H Q G H G T
&UHDWH D UHSRUW ZLWK WKH G D Z W D Q G R S O D I E Q L H G J H S X F U S R Y
W K H G D W D W R O G R D N H I D V W R U H Q E S U B Y H P H Q W

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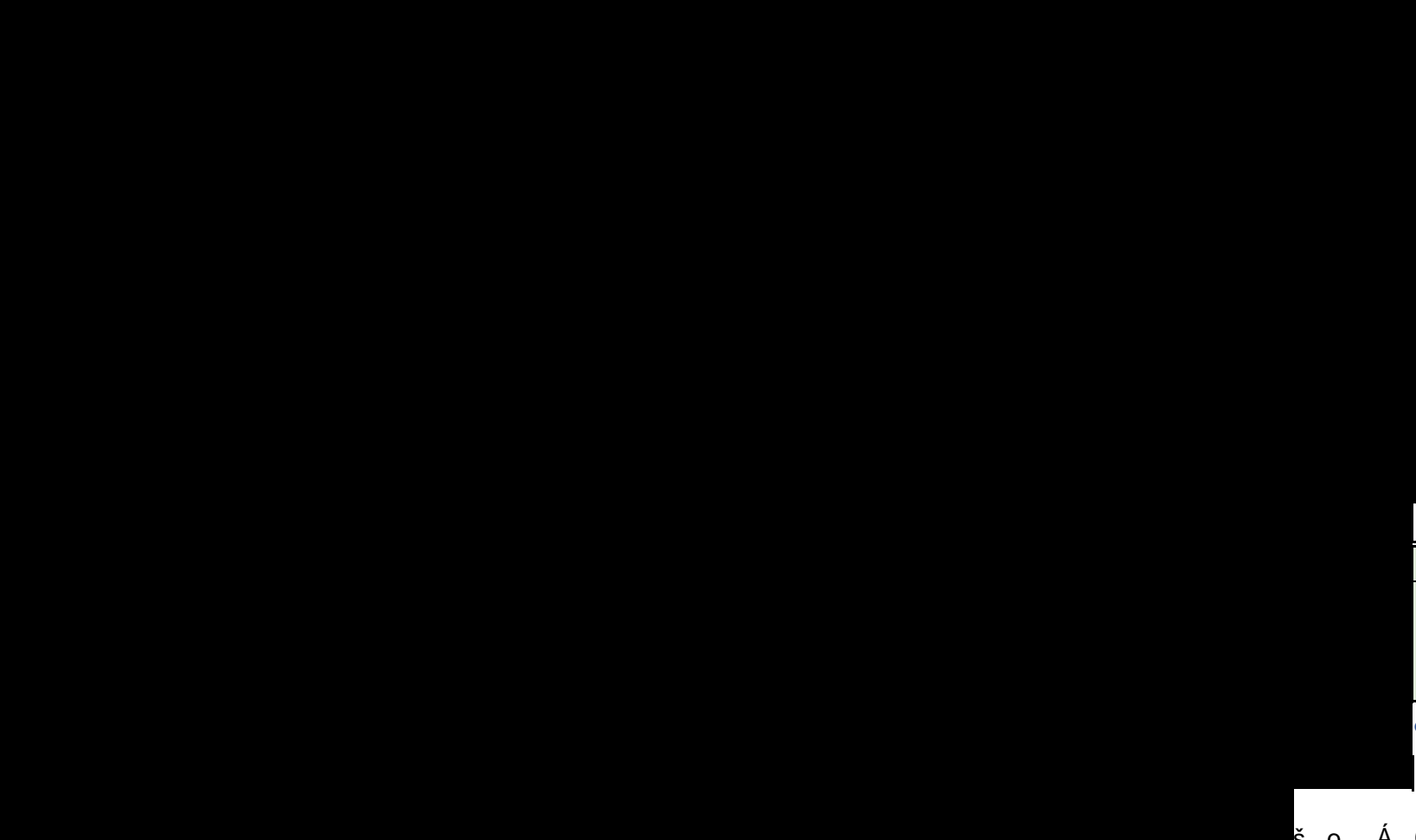
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