

Consumer Reports PrivacyCon 2018 submission

Consumer Reports proposes to present to PrivacyCon its evaluation of the privacy and security aspects of connected televisions. Consumer Reports is a nonprofit organization dedicated to the unbiased and scientific evaluation of consumer goods and services. Since 1936, we have published a monthly periodical—and later, regular online content—comparing a broad range of products on various dimensions that may be important to prospective buyers.

In March of last year, Consumer Reports announced the launch of the the Digital Standard, an effort to begin measuring consumer products on new metrics such as privacy, secpmake an informed decision v We were pleased to present the initial stages of this framework at PrivacyCon 2017.

As its first practical application of the Digital Standard, Consumer Reports and partners including Disconnect.me, Ranking Digital Rights, and the Cyber Independent Testing Lab evaluated several smart televisions for privacy and security considerations. In all, our testers looked at more than 200 separate indicators for two dozen criteria, including transparency about data collection, user controls, third-party data sharing, and the use of encryption.

Some of the issues that we intend to highlight include:

- Disclosures during initial install
- Disclosure in privacy policies and Terms of Service
- Use of automated content recognition and related technologies to detect viewing content
- Data flows to manufacturers and third parties
- User choices during initial install
- Ease and efficacy of privacy settings
- Use of encryption and other security best practices

The results of the television study will be published in Consumer Reports Online before the end of the calendar year. While we will not be scoring the televisions using traditional Consumer Reports ratings, we will indicate which televisions performed generally better or worse according to our metrics. As our evaluation processes mature, we expect to be able to incorporate many of the criteria contained in the Digital Standard into our formal rating processes.

We believe that this research is complementary to the important work that the FTC has done around smart TVs, including the FTC's December 2015 workshop on connected entertainment systems, and the enforcement action against Vizio over the collection and sharing of sensitive viewing data without consumer consent. We hope to highlight what has changed in just the past two years with regard to smart TVs, and to discuss how we are evolving our testing protocols to incorporate the values laid out in the Digital Standard.

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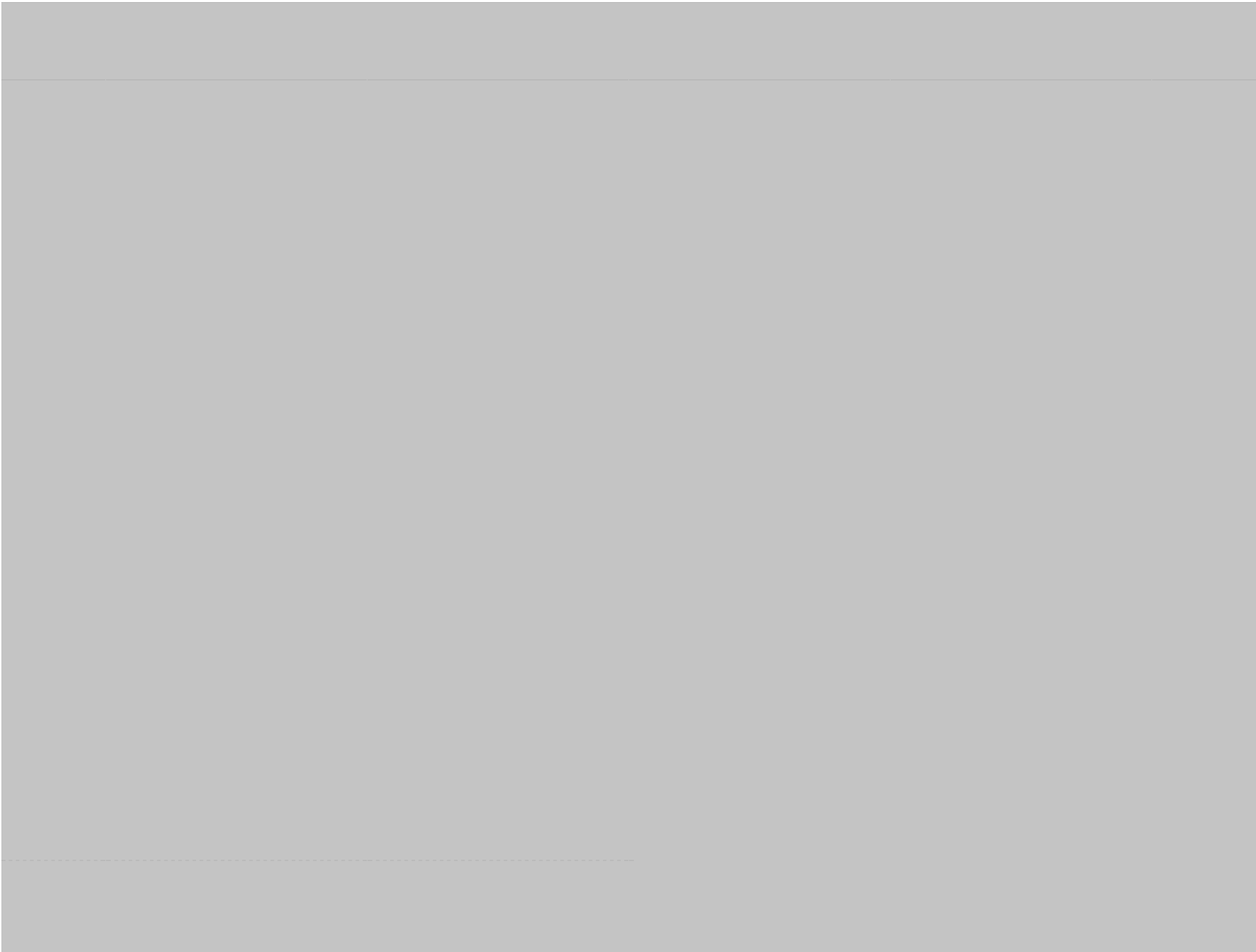
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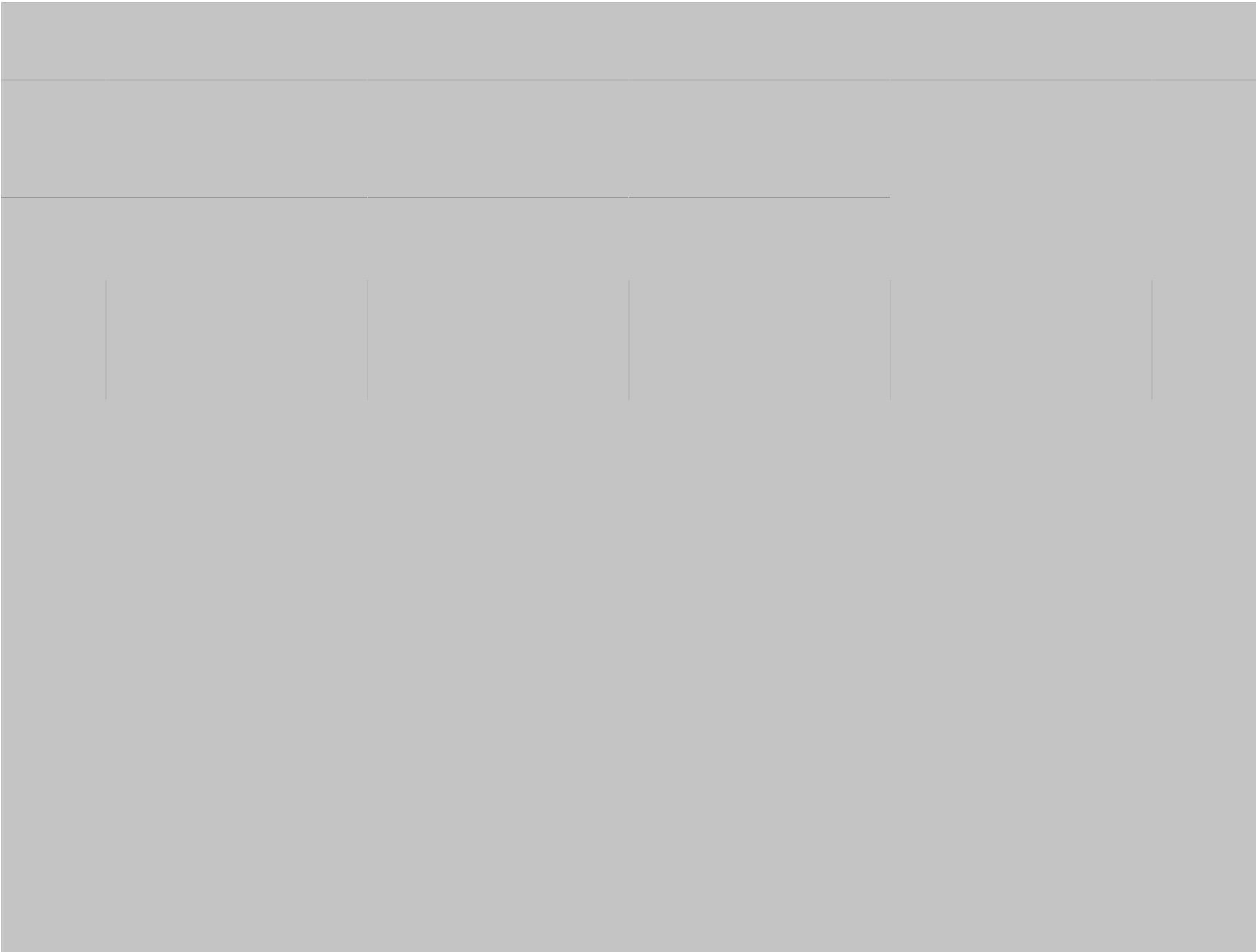
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\$)*" -k()300k+3. k-"?\$(-)k
+\$\$. +"- (k-"#3)"5k)\$k*\$%k
)*"k+\$; ?3. >k)-'3)(k')(k
, ("-(k0-" "5\$; &\$0k
"1?-" (('\$. k3. 5k?-' /3+>k
-'2*)(

O(k?3-)&\$0k')(k5'+('\$\$. E
; 38'. 2k+\$\$. ('5"- (k*\$%k
#3%(k300" +)k0-" "5\$; &\$0k
"1?-" (('\$. k3. 5k?-' /3+>k'. &
V, -(5'+)'\$. (k%*" -"k')k
\$?"-3)" (

N" 2, #3-#>k3(((" (k0-" "k
"1?-" (('\$. k3. 5k?-' /3+>k
-'(8(k3(((\$+'3)"5k%)*k
"1'()). 2k?-\$5, +)(k3. 5k
("-/'+" (

O(((" (k0-" "k"1?-" (('\$. k
3. 5k?-' /3+>k-'(8(k
3(((\$+'3)"5k%)*&k3k. "%k
3+)' /')>k'. +#, 5'. 2k)*"k

9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

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9" ()k: 3; "

J-')" -'3

k. 5'+3)\$-(

B-\$+"5, -"kL/" -/'"%

9*"k+\$; ?3. >k.')'3)" (k\$-k
?3-)'+'?3)" (k'. k; ""')'. 2(k
'%)*k()38" *\$5"- (k) *3)k
-"?-" (".)k35/\$+3)" k\$. k
=" *3#0k\$0k\$-k3-"k?" \$?#"k
5'-" +)#>k3. 5k35/" -(" #>k
'; ?3+)" 5k=>k)*"k
+\$; ?3. >b(k=, ('. "(

J#" 3-k5'(+#\$ (, -" k\$0k
?-\$+" (" (k0\$-k-"+'/'/. 2k
+\$; ?#3'.)

B-\$+" ((k'. +#, 5" (k
+\$; ?#3'.) (k-"#3)" 5k)\$k
0-" "5\$; k\$0k" 1?-" ('\$. k
3. 5k?-' /3+>

J#" 3-k5'(+#\$ (, -" k\$0k
?-\$+" ((k0\$-k-" (?\$. 5'. 2k)\$k
+\$; ?#3'.)

9*"k+\$; ?3. >k-"?-\$-)(k\$. k
)*"k. ; ="-k\$0k+\$; ?#3'.) (k
-"+'/'" 5k

9*"k+\$; ?3. >k?-\$/'5" (k
"/'5". +'k)*3)k'(k (k
-" (?\$. 5'. 2k)\$k
+\$; ?#3'.) (k

9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

809H

H9"8)0885@;&58

9*"&+\$; ?3. >l%\$-8(l)\$&
35/3. +"&3##&)" +*. \$#2>&
3. 5&. . \$/3)'\$. @. \$)W, ()&
')(&\$%. &.)" -" ()(6

! H9"8)5\$%#"

9*"&?-5\$, +)M(&(\$0)%3-"&'(&
?, =#'+#>&3/3'#3=#'6

4\$0)%3-"&'(&\$?" . &(\$, -+"6

1")"-; '. "&'0&+\$5" &'(&
3/3'#3=#'6

1")"-; '. "&)>?"&\$0&\$?" . &
(\$, -+"&#+". ('6

6" (. "+'32&400)

9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

! !%:+)5-)!"%@&#"
.81)3%&@#()350&#()
15#\$. "8+

k&+3. &"3('>w'. 5@-"35@
3. 5&, . 5"-()3. 5&)*"&
?-'/3+>&?\$#'+>&3. 5U\$-&
)"-; (&\$0&("-/'+"6

9*" &9" -; (&\$0&("-/'+"&
09\$4T&3-" &"3(>w)\$w'. 56
9*" &9\$4&3-" &3/3'#3=#"&'. &
)*" . 2, 32"0(T&; \$()&
+\$; ; \$. #>&(?\$8\$)&)*"&
)*" . 2, 32"0(T&; \$()&. 2, . 12. (-" . 2, 32"0(T3. 2, 32"0(2, 342)8. 0971488. 5484T

K. /" ()'23)'\$. &3. 5&3. 3#>('(&
\$0&?, =#'+#>&3/3'#3=#"&
5\$+, ; ".)3)'\$. &)\$&
5")"-; '. "&%*3)&)*"&
+\$; ?3. >&+#"3-#>&

0971488. 5484T



9" ()k: 3; "

J-')" -'3

k. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

^3'.)3'. (k3k?, =#+k3-+'/'&
\$-k+*3. 2" &#\$2&\$0&)*" &
?-'/3+>k? \$#+>



9" () 3; "

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9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

9*" &+\$; ?3. >&. \$)'0'" (&
3??-\$?-'3)"&3,)*\$-\$-)''" (&
3. 5&)*\$ (" &300" +)" 5&%*" . &
3&53)3&=-" 3+*&\$++ , -(6

9*" &+\$; ?3. >&%'##&. \$)'0>&
)*" &-"#"/3.)&3,)*\$-\$-)''" (&
)'*\$ \$,)&, . 5, " &5"#3>&
%*" . &3&53)3&=-" 3+*&
\$++ , -(6

9*" &+\$; ?3. >&+#" 3-#>&
5'(+#\$ (" (&)'&?-\$+" ((&0\$-&
. \$)'0>'. 2&53)3&(, =V" +)(&
%*\$&; '2*)&=" &300" +)" 5&=>&
3&53)3&=-" 3+*6

9" ()& 3; "

J-')" -'3

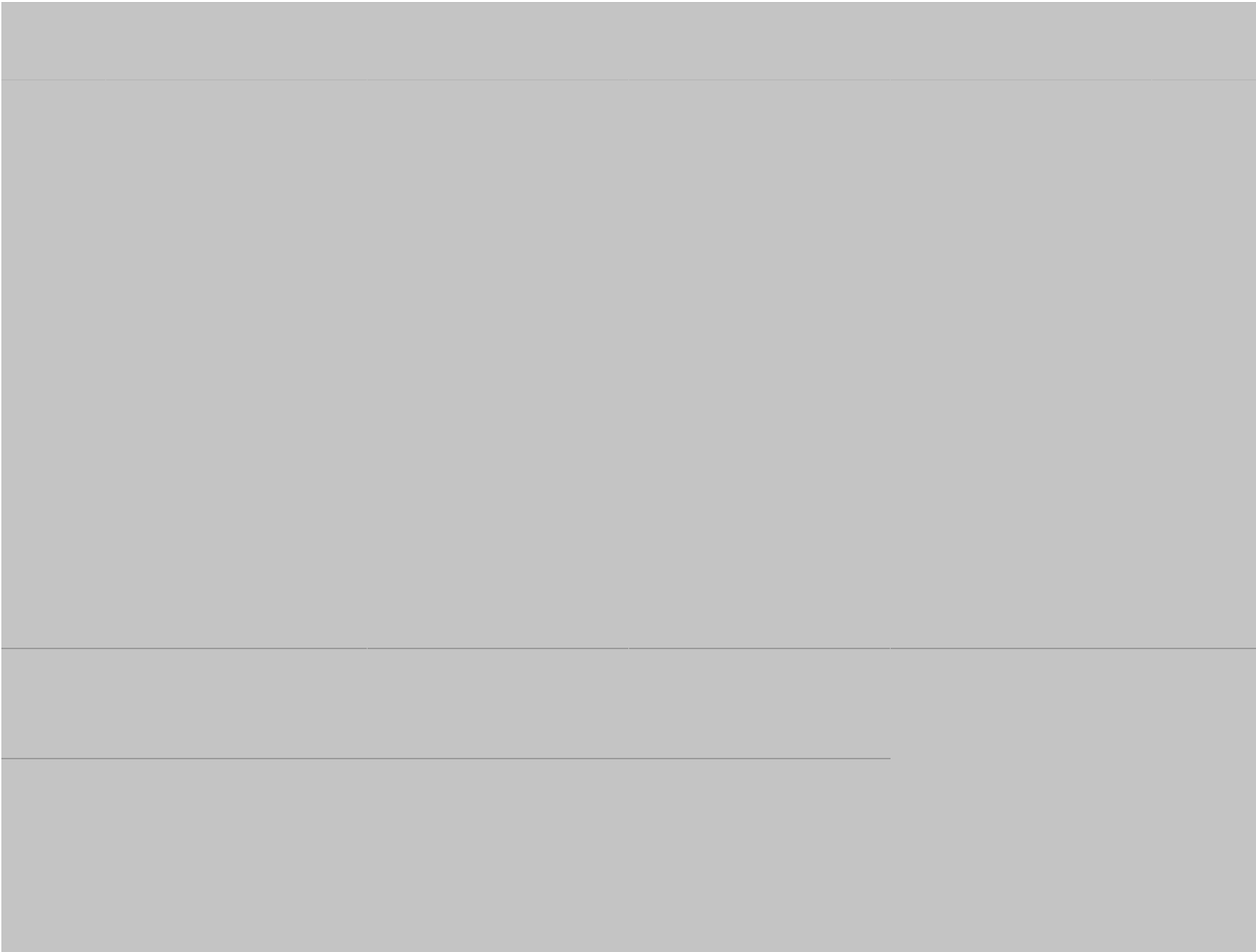
K. 5'+3)\$-(

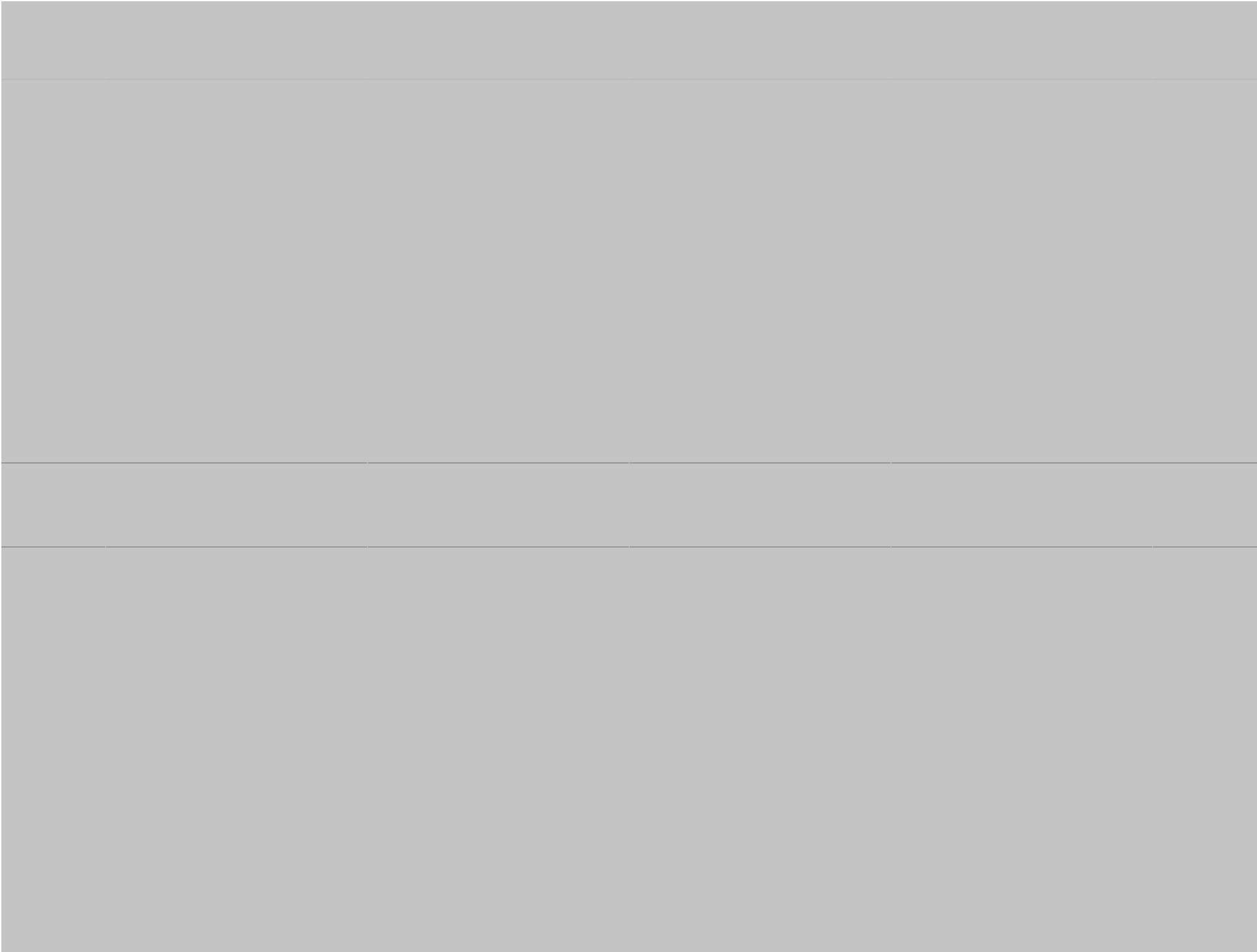
B-\$+"5, -" &L/" -/'"%

+\$, -)&\$-5" -(6

9*" &+\$; ?3. >#'()&*""&

. , ; =" -&\$0&-"A, " ()(&')&





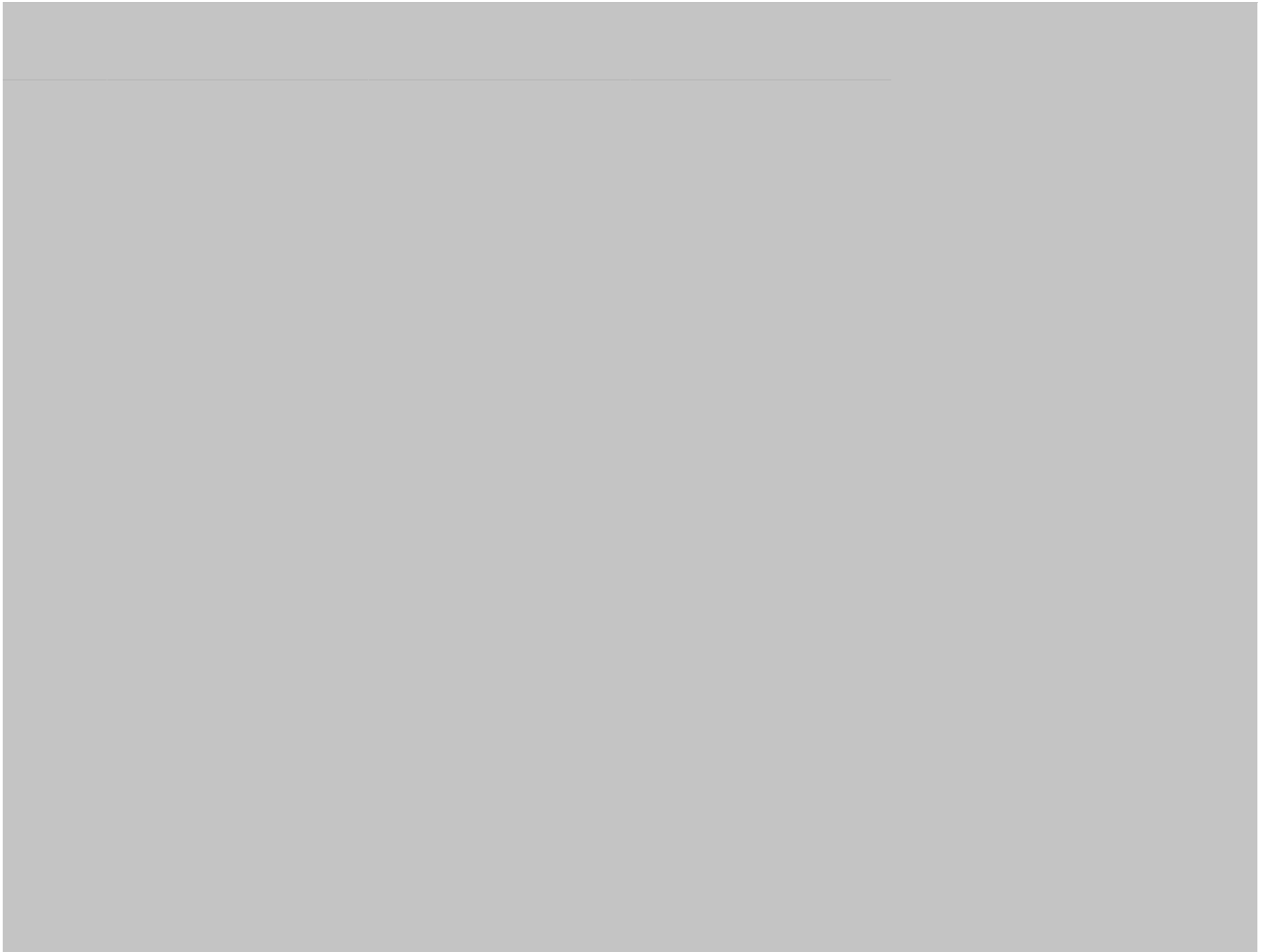
9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

9*"&+\$; ?3. >&%##&
+\$.)'. , "&)\$&; 3'.)3'. &)*""&
'.)". 5"5&0, . +)'\$. 3#')>&\$0&
)*"&?-\$5, +)&\$/" -&)*""&
,





9" ()& 3; "

J-')" -'3

K. 5'+3)\$-(

B-\$+"5, -"&L/" -/'"%

k&8. \$%&*%&\$0)" . &)*""&
+\$; ?3. >&\$-&\$-23. ']'3)'\$. &
, . '#3)"-3#>&+#\$ (" (& (" -&
3++\$, .)(

9*" &+\$; ?3. >&\$-&
\$-23. ']'3)'\$. &?, =#(" (*" (&
53)3&3=\$,)&)*""&. , ; =" -&\$0&
3++\$, .)((&)-" (-'+)(&\$-&
+#\$ (" (&\$. &')(&\$%. &
' . ')3)'/''6

