Appendix D
Misfit Item Plots

## Tables List

MSA 2005 Plots of Operational Items Flagged for Misfit .........................................D-3
MSA 2005 Plots of Field Test Items Flagged for Misfit .......................................... D-60

MSA 2005 Plots of Operational Items Flagged for Misfit

Grade 3, Mathematics, Item \#38A (Form 2), CR Item (Level 1)


Grade 3, Mathematics, Item \#38A (Form 2), CR Item (Level 2)


Grade 4, Mathematics, Item \#60A (Form 1), CR Item (Level 1)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Level <br> $\bigcirc$ Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 70 <br> EPM/OPM |  |

(2)

Grade 4, Mathematics, Item \#60A (Form 1), CR Item (Level 2)


Grade 4, Mathematics, Item \#33B (Form 2), CR Item (Level 1)


Grade 4, Mathematics, Item \#33B (Form 2), CR Item (Level 2)


Grade 4, Mathematics, Item \#33B (Form 2), CR Item (Level 3)


Grade 4, Mathematics, Item \#68A (Form 2), CR Item (Level 1)


Grade 4, Mathematics, Item \#68A (Form 2), CR Item (Level 2)


Grade 5, Mathematics, Item \#63B (All Forms), CR Item (Level 1)


Grade 5, Mathematics, Item \#63B (All Forms), CR Item (Level 2)


Grade 5, Mathematics, Item \#63B (All Forms), CR Item (Level 3)


Grade 5, Mathematics, Item \#33B (Form 1), CR Item (Level 1)

| 祭 Item Detail |  |  |  | - - a $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C C/Gamma Leve C Item number | $\frac{\hat{\imath}}{\frac{n}{n}}$ | Active Item \# $76$ <br> EPM/OPM |  |



Grade 5, Mathematics, Item \#33B (Form 1), CR Item (Level 2)



Grade 5, Mathematics, Item \#33B (Form 1), CR Item (Level 3)

Level 3

Grade 6, Mathematics, Item \#81B (Form 1), CR Item (Level 1)


Grade 6, Mathematics, Item \#81B (Form 1), CR Item (Level 2)


Grade 6, Mathematics, Item \#81B (Form 1), CR Item (Level 3)


Grade 6, Mathematics, Item \#69B (Form 2), CR Item (Level 1)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Level Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 104 <br> EPM/OPM |  |



Grade 6, Mathematics, Item \#69B (Form 2), CR Item (Level 2)


Grade 6, Mathematics, Item \#69B (Form 2), CR Item (Level 3)

| 祭 Item Detail |  |  |  | - - a $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 104 <br> EPM/OPM |  |



Grade 7, Mathematics, Item \#55 (Form 1), SPR Item (Level 1)


Grade 7, Mathematics, Item \#55 (Form 1), SPR Item (Level 2)


Grade 7, Mathematics, Item \#63A (Form 1), CR Item (Level 1)


Grade 7, Mathematics, Item \#63A (Form 1), CR Item (Level 2)


Grade 7, Mathematics, Item \#68B (Form 1), CR Item (Level 1)

| 祭 Item Detail |  |  |  | - - a $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> C C/Gamma Leve <br> C Item number | 令 <br> n. <br> Clear | Active Item \# <br> 80 <br> EPM/OPM |  |



Grade 7, Mathematics, Item \#68B (Form 1), CR Item (Level 2)


Grade 7, Mathematics, Item \#68B (Form 1), CR Item (Level 3)



Grade 7, Mathematics, Item \#63 (Form 2), SPR Item (Level 1)


Grade 7, Mathematics, Item \#63 (Form 2), SPR Item (Level 2)

| \% Item Detail |  |  |  | - 可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha $C$ B/Gamma C C/Gamma Leve C Item number |  | Active Item \# $103$ <br> EPM/OPM |  |


| 1.13 | Item 103 <br> Level 2 |
| :--- | :--- |

Grade 7, Mathematics, Item \#67B (Form 2), CR Item (Level 1)


Grade 7, Mathematics, Item \#67B (Form 2), CR Item (Level 2)

Item 108
Level 2
1.27

Grade 7, Mathematics, Item \#67B (Form 2), CR Item (Level 3)


| 1.60 | Item 108 <br> Level 3 |
| :--- | :--- |
| 4.81 |  |

Grade 7, Mathematics, Item \#76B (Form 2), CR Item (Level 1)


Grade 7, Mathematics, Item \#76B (Form 2), CR Item (Level 2)



Grade 7, Mathematics, Item \#76B (Form 2), CR Item (Level 3)


| Item 112 |
| :---: |
| Level 3 |
| 0.94 |

Grade 8, Mathematics, Item \#37B (Form 1), \#39B (Form 2), CR Item (Level 1)


Grade 8, Mathematics, Item \#37B (Form 1), \#39B (Form 2), CR Item (Level 2)


Grade 8, Mathematics, Item \#37B (Form 1), \#39B (Form 2), CR Item (Level 3)


Grade 8, Mathematics, Item \#37B (Form 1), \#39B (Form 2), CR Item (Level 4)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Leve Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 34 <br> EPM/OPM |  |

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Grade 8, Mathematics, Item \#46B (Form 1), CR Item (Level 1)


Grade 8, Mathematics, Item \#46B (Form 1), CR Item (Level 2)



Grade 8, Mathematics, Item \#46B (Form 1), CR Item (Level 3)


Grade 8, Mathematics, Item \#64 (Form 1), SPR Item (Level 1)


Grade 8, Mathematics, Item \#64 (Form 1), SPR Item (Level 2)


Grade 8, Mathematics, Item \#65A (Form 1), CR Item (Level 1)


Grade 8, Mathematics, Item \#65A (Form 1), CR Item (Level 2)


Grade 8, Mathematics, Item \#65B (Form 1), CR Item (Level 1)

| \% Item Detail |  |  |  | - $\square^{\text {a }}$ 区 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Leve <br> C Item number |  | Active Item \# 75 <br> EPM/OPM |  |



Grade 8, Mathematics, Item \#65B (Form 1), CR Item (Level 2)

| 察 Item Detail |  |  |  | - 可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# 75 <br> EPM/OPM |  |



Grade 8, Mathematics, Item \#65B (Form 1), CR Item (Level 3)


Grade 8, Mathematics, Item \#65B (Form 1), CR Item (Level 4)

| 察 Item Detail |  |  |  | - 可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# 75 <br> EPM/OPM |  |



Grade 8, Mathematics, Item \#76B (Form 1), CR Item (Level 1)


Grade 8, Mathematics, Item \#76B (Form 1), CR Item (Level 2)


Grade 8, Mathematics, Item \#76B (Form 1), CR Item (Level 3)



Grade 8, Mathematics, Item \#63B (Form 2), CR Item (Level 1)


Grade 8, Mathematics, Item \#63B (Form 2), CR Item (Level 2)


Grade 8, Mathematics, Item \#63B (Form 2), CR Item (Level 3)


MSA 2005 Plots of Field Test Items Flagged for Misfit
Grade 3, Mathematics, Form C, Item \#81, MC Item

| Active Value |  | Active Item \# |
| :---: | :---: | :---: |
| C. A/Alpha | U | $\longdiv { 1 2 1 }$ |
| $\bigcirc$ B/Gamma | 8. |  |
| - Item number | Clear | EPM/OPM |



Grade 4, Mathematics, Form A, Item \#85B, CR Item (Level 1)


Grade 4, Mathematics, Form A, Item \#85B, CR Item (Level 2)



Grade 4, Mathematics, Form A, Item \#85B, CR Item (Level 3)



Grade 5，Mathematics，Form A，Item \＃87A，CR Item（Level 1）

| 察 Item Detail |  |  |  | －可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A／Alpha C B／Gamma C／Gamma Leve C Item number | 令 <br> n． <br> Clear | Active Item \＃ $106$ <br> EPM／OPM |  |



Grade 5, Mathematics, Form A, Item \#87A, CR Item (Level 2)

| 繁 Item Detail |  |  |  | - \|ar |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Leve Item number | 令 <br> n. <br> Clear | Active Item \# <br> 106 <br> EPM/OPM |  |



Grade 5, Mathematics, Form D, Item \#85B, CR Item (Level 1)


Grade 5, Mathematics, Form D, Item \#85B, CR Item (Level 2)

| 繁 Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C <br> B/Gamma <br> C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline \text { n } \\ \hline \text { Clear } \\ \hline \end{array}$ |  |  |



Grade 5, Mathematics, Form D, Item \#85B, CR Item (Level 3)


Grade 6, Mathematics, Form A, Item \#93, MC Item

| 察 Item Detail |  |  |  | - 훚 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C/Gamma Level C Item number | $\begin{array}{\|c\|} \hline \text { 令 } \\ \hline \text { n. } \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# $132$ <br> EPM/OPM |  |



Grade 6, Mathematics, Form B, Item \#89A, CR Item (Level 1)


Grade 6, Mathematics, Form B, Item \#89A, CR Item (Level 2)


Grade 6, Mathematics, Form B, Item \#89B, CR Item (Level 1)

| 察 Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha B/Gamma C/Gamma Level Item number | $\begin{array}{\|c\|} \hat{v} \\ \hline \text { n } \\ \text { Clear } \\ \hline \end{array}$ | Active Item \# $144$ <br> EPM/OPM |  |



Grade 6, Mathematics, Form B, Item \#89B, CR Item (Level 2)


Grade 6, Mathematics, Form B, Item \#89B, CR Item (Level 3)


Grade 6, Mathematics, Form C, Item \#82B, CR Item (Level 1)


Grade 6, Mathematics, Form C, Item \#82B, CR Item (Level 2)


Grade 6, Mathematics, Form C, Item \#82B, CR Item (Level 3)


Grade 6, Mathematics, Form D, Item \#85B, CR Item (Level 1)


Grade 6, Mathematics, Form D, Item \#85B, CR Item (Level 2)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Leve Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# 162 <br> EPM/OPM |  |



Grade 6, Mathematics, Form D, Item \#85B, CR Item (Level 3)


| 1.07 | Item 162 <br> Level 3 1.79 |
| :--- | :--- |

Grade 6, Mathematics, Form E, Item \#82B, CR Item (Level 1)

| 繁 Item Detail |  |  |  | \|可 $\times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 167 <br> EPM/OPM |  |



Grade 6, Mathematics, Form E, Item \#82B, CR Item (Level 2)

| \% Item Detail |  |  |  | - 可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> C/Gamma Leve <br> C Item number | $\begin{aligned} & \mathrm{v} \\ & \hline \mathrm{n} \\ & \hline \text { Clear } \\ & \hline \end{aligned}$ | Active Item \# $167$ <br> EPM/OPM |  |

Item 167
Level 22

Grade 6, Mathematics, Form E, Item \#82B, CR Item (Level 3)


| Item 167 |  |
| :---: | :---: |
| Level 3 |  |
| 3.18 |  |

Grade 6，Mathematics，Form E，Item \＃85B，CR Item（Level 1）

| 察 Item Detail |  |  |  | － 可 $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A／Alpha <br> C B／Gamma <br> －C／Gamma Leve <br> C Item number | 合 <br> Clear | Active Item \＃ <br> 172 <br> EPM／OPM |  |



Grade 6, Mathematics, Form E, Item \#85B, CR Item (Level 2)



Grade 6, Mathematics, Form E, Item \#85B, CR Item (Level 3)


Grade 6, Mathematics, Form E, Item \#85B, CR Item (Level 4)

| 察 Item Detail |  |  |  | - 톶 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/GammaLeve <br> C Item number | 乞े <br> n. <br> Clear | Active Item \# <br> 172 <br> EPM/OPM |  |


| 1.04 | Item 172 |
| :--- | :--- |
| Level 4 |  |
| 1.51 |  |

Grade 7, Mathematics, Form A, Item \#91, SPR Item (Level 1)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Level <br> $\bigcirc$ Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 129 <br> EPM/OPM |  |



Grade 7, Mathematics, Form A, Item \#91, SPR Item (Level 2)


Grade 7, Mathematics, Form A, Item \#92, SPR Item (Level 1)

| 察 Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Level <br> $\bigcirc$ Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# 130 EPM/OPM |  |



Grade 7, Mathematics, Form A, Item \#92, SPR Item (Level 2)


Grade 7, Mathematics, Form A, Item \#93, SPR Item (Level 1)

| 察 Item Detail |  |  |  | - 可 $x$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Level Item number | $\frac{\hat{v}}{\frac{n}{n}}$ | Active Item \# 131 EPM/OPM |  |



Grade 7, Mathematics, Form A, Item \#93, SPR Item (Level 2)


Grade 7, Mathematics, Form A, Item \#94, SPR Item (Level 1)


Grade 7, Mathematics, Form A, Item \#94, SPR Item (Level 2)


Grade 7, Mathematics, Form B, Item \#93B, CR Item (Level 1)


Grade 7, Mathematics, Form B, Item \#93B, CR Item (Level 2)

| \% Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Leve Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# $153$ <br> EPM/OPM |  |



Grade 7, Mathematics, Form B, Item \#93B, CR Item (Level 3)


| 0.99 | Ltem 153 <br> Level <br> 2.52 |
| :--- | :--- |

Grade 7, Mathematics, Form B, Item \#96, SPR Item (Level 1)

| \% Item Detail |  |  |  | - 뚲 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Level Item number | $\begin{array}{\|c\|} \hline \text { 令 } \\ \hline \text { n } \\ \hline \text { Clear } \end{array}$ |  |  |



Grade 7, Mathematics, Form B, Item \#96, SPR Item (Level 2)

| 察 Item Detail |  |  |  | - - $\square^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C C/Gamma Leve C Item number | $\hat{\imath}$ <br> n. <br> Clear | Active Item \# $156$ <br> EPM/OPM |  |



Grade 7, Mathematics, Form C, Item \#84B, CR Item (Level 1)

| \% Item Detail |  |  |  | - \|a|x |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 164 <br> EPM/OPM |  |



Grade 7, Mathematics, Form C, Item \#84B, CR Item (Level 2)



Grade 7, Mathematics, Form C, Item \#84B, CR Item (Level 3)

| \% Item Detail |  |  |  | - $\underline{\square}_{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Leve <br> C Item number |  | Active Item \# <br> 164 <br> EPM/OPM |  |



Grade 7, Mathematics, Form C, Item \#84B, CR Item (Level 4)

Item 164

Grade 7, Mathematics, Form C, Item \#87B, CR Item (Level 1)


Grade 7, Mathematics, Form C, Item \#87B, CR Item (Level 2)


Grade 7, Mathematics, Form C, Item \#87B, CR Item (Level 3)



Grade 7, Mathematics, Form E, Item \#87A, CR Item (Level 1)


Grade 7, Mathematics, Form E, Item \#87A, CR Item (Level 2)


Grade 7, Mathematics, Form E, Item \#87B, CR Item (Level 1)

| \% Item Detail |  |  |  | - - |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 191 <br> EPM/OPM |  |



Grade 7, Mathematics, Form E, Item \#87B, CR Item (Level 2)



Grade 7，Mathematics，Form E，Item \＃87B，CR Item（Level 3）

| 察 Item Detail |  |  |  | － ⿹丁口 $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A／Alpha B／Gamma C／Gamma Leve Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \＃ 191 <br> EPM／OPM |  |



Grade 7, Mathematics, Form E, Item \#87B, CR Item (Level 4)



Grade 8, Mathematics, Form A, Item \#81, MC Item

| \% Item Detail |  |  |  | - 톶 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> C C/Gamma Level <br> - Item number |  | Active Item \# $123$ <br> EPM/OPM |  |

0.93
-0.94
0.20

Grade 8, Mathematics, Form A, Item \#83B, CR Item (Level 1)


Grade 8, Mathematics, Form A, Item \#83B, CR Item (Level 2)


Grade 8, Mathematics, Form A, Item \#83B, CR Item (Level 3)

| \% Item Detail |  |  |  | - $\square^{\text {a }} \times$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Leve Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# $126$ <br> EPM/OPM |  |


| Item 126 |
| :---: | :---: |
| Level 3 |
| 1.08 |

Grade 8, Mathematics, Form A, Item \#84A, CR Item (Level 1)


Grade 8, Mathematics, Form A, Item \#84A, CR Item (Level 2)


Grade 8, Mathematics, Form A, Item \#93, SPR Item (Level 1)

| * Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value |  |  |  |
|  | C A/Alpha | 介 |  |  |
|  | C B/Gamma |  |  |  |
|  | - litam number | Clear | EPM/OPM |  |



Grade 8, Mathematics, Form A, Item \#93, SPR Item (Level 2)


Grade 8, Mathematics, Form B, Item \#83, SPR Item (Level 1)


Grade 8, Mathematics, Form B, Item \#83, SPR Item (Level 2)


Grade 8, Mathematics, Form B, Item \#90, SPR Item (Level 1)

| \% Item Detail |  |  |  | - 풎 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# $154$ <br> EPM/OPM |  |

(Leve1 154

Grade 8, Mathematics, Form B, Item \#90, SPR Item (Level 2)



Grade 8, Mathematics, Form C, Item \#77, SPR Item (Level 1)


Grade 8, Mathematics, Form C, Item \#77, SPR Item (Level 2)



Grade 8, Mathematics, Form C, Item \#83A, CR Item (Level 1)


Grade 8, Mathematics, Form C, Item \#83A, CR Item (Level 2)


Grade 8, Mathematics, Form C, Item \#88, MC Item

| 繁 Item Detail |  |  |  | - 뚲 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | - Active Value <br> C A/Alpha <br> C B/Gamma <br> C C/Gamma Level <br> © Item numbel | 令 <br> n. <br> Clear | Active Item \# $169$ <br> EPM/OPM |  |



Grade 8, Mathematics, Form D, Item \#78B, CR Item (Level 1)

| 祭 Item Detail |  |  |  | - - a $^{\text {x }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# <br> 174 <br> EPM/OPM |  |



Grade 8, Mathematics, Form D, Item \#78B, CR Item (Level 2)

| 管 Item Detail |  |  |  | - 후지 |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> C C/Gamma Leve <br> C Item number | 令 <br> n. <br> Clear | Active Item \# <br> 174 <br> EPM/OPM |  |



Grade 8, Mathematics, Form D, Item \#78B, CR Item (Level 3)

| 察 Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C B/Gamma <br> - C/Gamma Level <br> C Item number | $\left.\frac{\hat{\imath}}{\mid n} \right\rvert\,$ | Active Item \# $174$ <br> EPM/OPM |  |



Grade 8, Mathematics, Form D, Item \#78B, CR Item (Level 4)

| 察 Item Detail |  |  |  | - \|rax |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \text { v } \\ \hline \text { n } \\ \hline \text { Clear } \end{array}$ | Active Item \# $174$ <br> EPM/OPM |  |

Item 174

Grade 8, Mathematics, Form D, Item \#86, RWO \#183, MC Item

| 察 Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Level Item number | 令 <br> n. <br> Clear | Active Item \# $183$ <br> EPM/OPM |  |



Grade 8, Mathematics, Form E, Item \#77B, CR Item (Level 1)

(tem

Grade 8, Mathematics, Form E, Item \#77B, CR Item (Level 2)

| 察 Item Detail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value <br> C A/Alpha <br> C <br> B/Gamma <br> C/Gamma Leve <br> C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline \text { n } \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# $186$ <br> EPM/OPM |  |



Grade 8, Mathematics, Form E, Item \#77B, CR Item (Level 3)

| \% Item Detail |  |  |  | - - |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value C A/Alpha C B/Gamma C/Gamma Leve C Item number | $\begin{array}{\|c\|} \hline \hat{v} \\ \hline n \\ \hline \text { Clear } \\ \hline \end{array}$ | Active Item \# 186 <br> EPM/OPM |  |


| 0.67 | Item 186 |
| :--- | :--- |
| Level 3 |  |
| 0.48 |  |

Grade 8, Mathematics, Form F, Item \#78, MC Item

| Item Detail |  |  |  | - $\square^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| File Item Detail |  |  |  |  |
|  | Active Value A/Alpha B/Gamma C/Gamma Level Item number | 合 <br> n. <br> Clear | Active Item \# <br> 204 <br> EPM/OPM |  |


| 3.86 <br> 7.40 <br> 0.15 | $\left.\begin{array}{c}\text { Item } 204 \\ \text { Level } 1 \\ \hline\end{array}\right)$ |
| :---: | :---: |

