

**APPENDIX A**

**DELTA ANALYSES**



All of the tables in Appendix A use the following abbreviations in column headings:

- IREF** = Internal Reference Number for each item
- OLDP** = 2004 Item Difficulty Index
- NEWP** = 2005 Item Difficulty Index
- OLDDDELTA** = 2004 Delta Value
- NEWDELTA** = 2005 Delta Value
- LINE** = Regression line
- MAX** = Maximum Number of Raw Score Points
- DISCARD** = Whether or not the item was discarded from use as an equating item; “NO” is the default

For additional information regarding delta analyses, refer to section 4.3 of this document.

**Table A1: MCAS 2004–2005 Reading Grade 3**

| <b>IREF</b> | <b>OLDP</b> | <b>NEWP</b> | <b>OLDDDELTA</b> | <b>NEWDELTA</b> | <b>LINE</b> | <b>MAX</b> | <b>DISCARD</b> |
|-------------|-------------|-------------|------------------|-----------------|-------------|------------|----------------|
| 214073      | 0.830       | 0.810       | 9.183            | 9.488           | 9.419       | 1          | NO             |
| 214074      | 0.910       | 0.870       | 7.637            | 8.494           | 8.435       | 1          | YES            |
| 214075      | 0.910       | 0.880       | 7.637            | 8.300           | 8.243       | 1          | NO             |
| 214076      | 0.780       | 0.800       | 9.911            | 9.634           | 9.562       | 1          | NO             |
| 214077      | 0.820       | 0.810       | 9.339            | 9.488           | 9.419       | 1          | NO             |
| 214078      | 0.850       | 0.830       | 8.854            | 9.183           | 9.117       | 1          | NO             |
| 214079      | 0.790       | 0.770       | 9.774            | 10.045          | 9.969       | 1          | NO             |
| 214080      | 0.560       | 0.520       | 12.396           | 12.799          | 12.696      | 1          | NO             |
| 214082      | 0.950       | 0.950       | 6.421            | 6.421           | 6.383       | 1          | NO             |
| 214083      | 0.920       | 0.930       | 7.380            | 7.097           | 7.052       | 1          | NO             |
| 214084      | 0.920       | 0.930       | 7.380            | 7.097           | 7.052       | 1          | NO             |
| 214085      | 0.840       | 0.840       | 9.022            | 9.022           | 8.957       | 1          | NO             |
| 214086      | 0.860       | 0.880       | 8.679            | 8.300           | 8.243       | 1          | NO             |
| 214087      | 0.840       | 0.820       | 9.022            | 9.339           | 9.271       | 1          | NO             |
| 214088      | 0.780       | 0.770       | 9.911            | 10.045          | 9.969       | 1          | NO             |
| 214089      | 0.830       | 0.830       | 9.183            | 9.183           | 9.117       | 1          | NO             |
| 214091      | 0.820       | 0.780       | 9.339            | 9.911           | 9.837       | 1          | NO             |
| 214092      | 0.950       | 0.950       | 6.421            | 6.421           | 6.383       | 1          | NO             |
| 214093      | 0.910       | 0.910       | 7.637            | 7.637           | 7.586       | 1          | NO             |
| 214094      | 0.720       | 0.710       | 10.669           | 10.787          | 10.704      | 1          | NO             |
| 214095      | 0.810       | 0.800       | 9.488            | 9.634           | 9.562       | 1          | NO             |
| 214096      | 0.870       | 0.880       | 8.494            | 8.300           | 8.243       | 1          | NO             |
| 214097      | 0.720       | 0.740       | 10.669           | 10.427          | 10.347      | 1          | NO             |
| 214098      | 0.760       | 0.750       | 10.175           | 10.302          | 10.224      | 1          | NO             |
| 214100      | 0.780       | 0.810       | 9.911            | 9.488           | 9.419       | 1          | NO             |
| 214101      | 0.850       | 0.850       | 8.854            | 8.854           | 8.791       | 1          | NO             |
| 214102      | 0.570       | 0.570       | 12.295           | 12.295          | 12.196      | 1          | NO             |
| 214103      | 0.780       | 0.790       | 9.911            | 9.774           | 9.702       | 1          | NO             |
| 214104      | 0.850       | 0.830       | 8.854            | 9.183           | 9.117       | 1          | NO             |
| 214105      | 0.640       | 0.660       | 11.566           | 11.350          | 11.261      | 1          | NO             |
| 214106      | 0.810       | 0.820       | 9.488            | 9.339           | 9.271       | 1          | NO             |
| 214107      | 0.930       | 0.930       | 7.097            | 7.097           | 7.052       | 1          | NO             |

## Appendix A

**Table A2: MCAS 2004–2005 English Language Arts Grade 4**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 225681 | 0.910 | 0.890 | 7.637     | 8.094    | 8.047  | 1   | NO      |
| 225681 | 0.910 | 0.900 | 7.637     | 7.874    | 7.827  | 1   | NO      |
| 225683 | 0.910 | 0.900 | 7.637     | 7.874    | 7.827  | 1   | NO      |
| 225683 | 0.910 | 0.910 | 7.637     | 7.637    | 7.590  | 1   | NO      |
| 225685 | 0.870 | 0.860 | 8.494     | 8.679    | 8.632  | 1   | NO      |
| 225685 | 0.870 | 0.870 | 8.494     | 8.494    | 8.448  | 1   | NO      |
| 225686 | 0.260 | 0.260 | 15.573    | 15.573   | 15.531 | 1   | NO      |
| 225686 | 0.260 | 0.270 | 15.573    | 15.451   | 15.409 | 1   | NO      |
| 225688 | 0.530 | 0.530 | 12.699    | 12.699   | 12.655 | 1   | NO      |
| 225688 | 0.530 | 0.510 | 12.699    | 12.900   | 12.855 | 1   | NO      |
| 225691 | 0.750 | 0.730 | 10.302    | 10.549   | 10.503 | 1   | NO      |
| 225691 | 0.750 | 0.740 | 10.302    | 10.427   | 10.381 | 1   | NO      |
| 225692 | 0.580 | 0.580 | 12.192    | 12.192   | 12.148 | 1   | NO      |
| 225692 | 0.580 | 0.610 | 12.192    | 11.883   | 11.838 | 1   | NO      |
| 225693 | 0.890 | 0.900 | 8.094     | 7.874    | 7.827  | 1   | NO      |
| 225693 | 0.890 | 0.910 | 8.094     | 7.637    | 7.590  | 1   | NO      |
| 225694 | 0.663 | 0.668 | 11.323    | 11.268   | 11.223 | 4   | NO      |
| 225694 | 0.663 | 0.690 | 11.323    | 11.017   | 10.971 | 4   | NO      |
| 225701 | 0.850 | 0.860 | 8.854     | 8.679    | 8.632  | 1   | NO      |
| 225701 | 0.850 | 0.860 | 8.854     | 8.679    | 8.632  | 1   | NO      |
| 225706 | 0.840 | 0.830 | 9.022     | 9.183    | 9.137  | 1   | NO      |
| 225706 | 0.840 | 0.840 | 9.022     | 9.022    | 8.976  | 1   | NO      |
| 225709 | 0.510 | 0.520 | 12.900    | 12.799   | 12.755 | 1   | NO      |
| 225709 | 0.510 | 0.520 | 12.900    | 12.799   | 12.755 | 1   | NO      |
| 225710 | 0.810 | 0.800 | 9.488     | 9.634    | 9.587  | 1   | NO      |
| 225710 | 0.810 | 0.810 | 9.488     | 9.488    | 9.442  | 1   | NO      |
| 225713 | 0.480 | 0.470 | 13.201    | 13.301   | 13.257 | 1   | NO      |
| 225713 | 0.480 | 0.460 | 13.201    | 13.402   | 13.358 | 1   | NO      |
| 225720 | 0.720 | 0.710 | 10.669    | 10.787   | 10.741 | 1   | NO      |
| 225720 | 0.720 | 0.720 | 10.669    | 10.669   | 10.623 | 1   | NO      |
| 225721 | 0.390 | 0.380 | 14.117    | 14.222   | 14.179 | 1   | NO      |
| 225721 | 0.390 | 0.390 | 14.117    | 14.117   | 14.074 | 1   | NO      |
| 225728 | 0.530 | 0.520 | 12.699    | 12.799   | 12.755 | 1   | NO      |
| 225728 | 0.530 | 0.540 | 12.699    | 12.598   | 12.554 | 1   | NO      |
| 225729 | 0.820 | 0.840 | 9.339     | 9.022    | 8.976  | 1   | NO      |
| 225729 | 0.820 | 0.850 | 9.339     | 8.854    | 8.808  | 1   | NO      |
| 225730 | 0.520 | 0.520 | 12.799    | 12.799   | 12.755 | 1   | NO      |
| 225730 | 0.520 | 0.520 | 12.799    | 12.799   | 12.755 | 1   | NO      |
| 225731 | 0.600 | 0.600 | 11.987    | 11.987   | 11.942 | 1   | NO      |
| 225731 | 0.600 | 0.630 | 11.987    | 11.673   | 11.628 | 1   | NO      |
| 225732 | 0.578 | 0.540 | 12.218    | 12.598   | 12.554 | 4   | NO      |
| 225732 | 0.578 | 0.545 | 12.218    | 12.548   | 12.503 | 4   | NO      |
| 225736 | 0.730 | 0.700 | 10.549    | 10.902   | 10.857 | 1   | NO      |
| 225736 | 0.730 | 0.700 | 10.549    | 10.902   | 10.857 | 1   | NO      |
| 225743 | 0.550 | 0.520 | 12.497    | 12.799   | 12.755 | 4   | NO      |
| 225743 | 0.550 | 0.508 | 12.497    | 12.925   | 12.881 | 4   | NO      |
| 225750 | 0.610 | 0.600 | 11.883    | 11.987   | 11.942 | 1   | NO      |
| 225750 | 0.610 | 0.630 | 11.883    | 11.673   | 11.628 | 1   | NO      |
| 225753 | 0.880 | 0.860 | 8.300     | 8.679    | 8.632  | 1   | NO      |
| 225753 | 0.880 | 0.880 | 8.300     | 8.300    | 8.253  | 1   | NO      |
| 225754 | 0.930 | 0.920 | 7.097     | 7.380    | 7.332  | 1   | NO      |
| 225754 | 0.930 | 0.920 | 7.097     | 7.380    | 7.332  | 1   | NO      |
| 225756 | 0.900 | 0.910 | 7.874     | 7.637    | 7.590  | 1   | NO      |
| 225756 | 0.900 | 0.890 | 7.874     | 8.094    | 8.047  | 1   | NO      |
| 225758 | 0.530 | 0.520 | 12.699    | 12.799   | 12.755 | 4   | NO      |
| 225758 | 0.530 | 0.520 | 12.699    | 12.799   | 12.755 | 4   | NO      |

Table A3: MCAS 2004–2005 English Language Arts Grade 7

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 225543 | 0.910 | 0.900 | 7.637     | 7.874    | 7.741  | 1   | NO      |
| 225543 | 0.910 | 0.920 | 7.637     | 7.380    | 7.257  | 1   | NO      |
| 225546 | 0.720 | 0.690 | 10.669    | 11.017   | 10.821 | 1   | NO      |
| 225546 | 0.720 | 0.720 | 10.669    | 10.669   | 10.480 | 1   | NO      |
| 225549 | 0.900 | 0.900 | 7.874     | 7.874    | 7.741  | 1   | NO      |
| 225549 | 0.900 | 0.890 | 7.874     | 8.094    | 7.956  | 1   | NO      |
| 225551 | 0.850 | 0.830 | 8.854     | 9.183    | 9.024  | 1   | NO      |
| 225551 | 0.850 | 0.860 | 8.854     | 8.679    | 8.530  | 1   | NO      |
| 225553 | 0.820 | 0.810 | 9.339     | 9.488    | 9.323  | 1   | NO      |
| 225553 | 0.820 | 0.830 | 9.339     | 9.183    | 9.024  | 1   | NO      |
| 225554 | 0.620 | 0.590 | 11.778    | 12.090   | 11.872 | 1   | NO      |
| 225554 | 0.620 | 0.610 | 11.778    | 11.883   | 11.669 | 1   | NO      |
| 225556 | 0.280 | 0.280 | 15.331    | 15.331   | 15.049 | 1   | NO      |
| 225556 | 0.280 | 0.260 | 15.331    | 15.573   | 15.286 | 1   | NO      |
| 225561 | 0.650 | 0.610 | 11.459    | 11.883   | 11.669 | 1   | NO      |
| 225561 | 0.650 | 0.640 | 11.459    | 11.566   | 11.359 | 1   | NO      |
| 225565 | 0.418 | 0.405 | 13.833    | 13.962   | 13.707 | 4   | NO      |
| 225565 | 0.418 | 0.428 | 13.833    | 13.731   | 13.481 | 4   | NO      |
| 225567 | 0.640 | 0.610 | 11.566    | 11.883   | 11.669 | 1   | NO      |
| 225567 | 0.640 | 0.630 | 11.566    | 11.673   | 11.464 | 1   | NO      |
| 225569 | 0.820 | 0.810 | 9.339     | 9.488    | 9.323  | 1   | NO      |
| 225569 | 0.820 | 0.820 | 9.339     | 9.339    | 9.176  | 1   | NO      |
| 225570 | 0.740 | 0.760 | 10.427    | 10.175   | 9.996  | 1   | NO      |
| 225570 | 0.740 | 0.770 | 10.427    | 10.045   | 9.868  | 1   | NO      |
| 225571 | 0.640 | 0.650 | 11.566    | 11.459   | 11.254 | 1   | NO      |
| 225571 | 0.640 | 0.670 | 11.566    | 11.240   | 11.040 | 1   | NO      |
| 225572 | 0.568 | 0.620 | 12.320    | 11.778   | 11.567 | 4   | NO      |
| 225572 | 0.568 | 0.643 | 12.320    | 11.539   | 11.333 | 4   | NO      |
| 225608 | 0.650 | 0.610 | 11.459    | 11.883   | 11.669 | 1   | NO      |
| 225608 | 0.650 | 0.680 | 11.459    | 11.129   | 10.931 | 1   | NO      |
| 225617 | 0.650 | 0.560 | 11.459    | 12.396   | 12.173 | 1   | NO      |
| 225617 | 0.650 | 0.590 | 11.459    | 12.090   | 11.872 | 1   | NO      |
| 225623 | 0.800 | 0.770 | 9.634     | 10.045   | 9.868  | 1   | NO      |
| 225623 | 0.800 | 0.800 | 9.634     | 9.634    | 9.465  | 1   | NO      |
| 225647 | 0.750 | 0.710 | 10.302    | 10.787   | 10.595 | 1   | NO      |
| 225647 | 0.750 | 0.730 | 10.302    | 10.549   | 10.362 | 1   | NO      |
| 225652 | 0.870 | 0.850 | 8.494     | 8.854    | 8.702  | 1   | NO      |
| 225652 | 0.870 | 0.870 | 8.494     | 8.494    | 8.349  | 1   | NO      |
| 225653 | 0.670 | 0.620 | 11.240    | 11.778   | 11.567 | 1   | NO      |
| 225653 | 0.670 | 0.660 | 11.240    | 11.350   | 11.148 | 1   | NO      |
| 225656 | 0.820 | 0.780 | 9.339     | 9.911    | 9.737  | 1   | NO      |
| 225656 | 0.820 | 0.820 | 9.339     | 9.339    | 9.176  | 1   | NO      |
| 225659 | 0.670 | 0.640 | 11.240    | 11.566   | 11.359 | 1   | NO      |
| 225659 | 0.670 | 0.650 | 11.240    | 11.459   | 11.254 | 1   | NO      |
| 225660 | 0.723 | 0.518 | 10.639    | 12.825   | 12.592 | 4   | YES     |
| 225660 | 0.723 | 0.513 | 10.639    | 12.875   | 12.642 | 4   | YES     |
| 225661 | 0.810 | 0.780 | 9.488     | 9.911    | 9.737  | 1   | NO      |
| 225661 | 0.810 | 0.800 | 9.488     | 9.634    | 9.465  | 1   | NO      |
| 225663 | 0.740 | 0.710 | 10.427    | 10.787   | 10.595 | 1   | NO      |
| 225663 | 0.740 | 0.730 | 10.427    | 10.549   | 10.362 | 1   | NO      |
| 225664 | 0.830 | 0.810 | 9.183     | 9.488    | 9.323  | 1   | NO      |
| 225664 | 0.830 | 0.830 | 9.183     | 9.183    | 9.024  | 1   | NO      |
| 225665 | 0.590 | 0.550 | 12.090    | 12.497   | 12.272 | 1   | NO      |
| 225665 | 0.590 | 0.580 | 12.090    | 12.192   | 11.973 | 1   | NO      |
| 225667 | 0.485 | 0.465 | 13.150    | 13.351   | 13.109 | 4   | NO      |
| 225667 | 0.485 | 0.550 | 13.150    | 12.497   | 12.272 | 4   | NO      |

# Appendix A

**Table A4: MCAS 2004–2005 Mathematics Grade 4**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 221888 | 0.710 | 0.710 | 10.787    | 10.787   | 10.867 | 1   | NO      |
| 221888 | 0.710 | 0.740 | 10.787    | 10.427   | 10.499 | 1   | NO      |
| 221891 | 0.485 | 0.535 | 13.150    | 12.649   | 12.772 | 4   | NO      |
| 221891 | 0.485 | 0.553 | 13.150    | 12.472   | 12.592 | 4   | NO      |
| 221898 | 0.700 | 0.730 | 10.902    | 10.549   | 10.624 | 1   | NO      |
| 221898 | 0.700 | 0.730 | 10.902    | 10.549   | 10.624 | 1   | NO      |
| 221901 | 0.400 | 0.400 | 14.013    | 14.013   | 14.169 | 1   | NO      |
| 221901 | 0.400 | 0.430 | 14.013    | 13.706   | 13.854 | 1   | NO      |
| 221913 | 0.900 | 0.870 | 7.874     | 8.494    | 8.522  | 1   | NO      |
| 221913 | 0.900 | 0.880 | 7.874     | 8.300    | 8.323  | 1   | NO      |
| 221940 | 0.750 | 0.750 | 10.302    | 10.302   | 10.371 | 1   | NO      |
| 221940 | 0.750 | 0.770 | 10.302    | 10.045   | 10.108 | 1   | NO      |
| 221949 | 0.428 | 0.443 | 13.731    | 13.579   | 13.724 | 4   | NO      |
| 221949 | 0.428 | 0.450 | 13.731    | 13.503   | 13.646 | 4   | NO      |
| 221953 | 0.640 | 0.630 | 11.566    | 11.673   | 11.774 | 1   | NO      |
| 221953 | 0.640 | 0.650 | 11.566    | 11.459   | 11.555 | 1   | NO      |
| 221955 | 0.530 | 0.560 | 12.699    | 12.396   | 12.514 | 1   | NO      |
| 221955 | 0.530 | 0.550 | 12.699    | 12.497   | 12.617 | 1   | NO      |
| 221956 | 0.890 | 0.890 | 8.094     | 8.094    | 8.112  | 1   | NO      |
| 221956 | 0.890 | 0.910 | 8.094     | 7.637    | 7.644  | 1   | NO      |
| 221957 | 0.560 | 0.560 | 12.396    | 12.396   | 12.514 | 1   | NO      |
| 221957 | 0.560 | 0.560 | 12.396    | 12.396   | 12.514 | 1   | NO      |
| 221969 | 0.740 | 0.720 | 10.427    | 10.669   | 10.746 | 1   | NO      |
| 221969 | 0.740 | 0.720 | 10.427    | 10.669   | 10.746 | 1   | NO      |
| 221975 | 0.680 | 0.720 | 11.129    | 10.669   | 10.746 | 1   | NO      |
| 221975 | 0.680 | 0.680 | 11.129    | 11.129   | 11.218 | 1   | NO      |
| 221987 | 0.750 | 0.695 | 10.302    | 10.960   | 11.044 | 4   | NO      |
| 221987 | 0.750 | 0.720 | 10.302    | 10.669   | 10.746 | 4   | NO      |
| 221996 | 0.520 | 0.510 | 12.799    | 12.900   | 13.029 | 1   | NO      |
| 221996 | 0.520 | 0.520 | 12.799    | 12.799   | 12.927 | 1   | NO      |
| 222006 | 0.840 | 0.840 | 9.022     | 9.022    | 9.062  | 1   | NO      |
| 222006 | 0.840 | 0.840 | 9.022     | 9.022    | 9.062  | 1   | NO      |
| 222015 | 0.620 | 0.560 | 11.778    | 12.396   | 12.514 | 1   | NO      |
| 222015 | 0.620 | 0.550 | 11.778    | 12.497   | 12.617 | 1   | NO      |
| 222041 | 0.950 | 0.950 | 6.421     | 6.421    | 6.400  | 1   | NO      |
| 222041 | 0.950 | 0.940 | 6.421     | 6.781    | 6.768  | 1   | NO      |
| 222049 | 0.550 | 0.640 | 12.497    | 11.566   | 11.665 | 1   | NO      |
| 222049 | 0.550 | 0.620 | 12.497    | 11.778   | 11.882 | 1   | NO      |
| 222051 | 0.540 | 0.530 | 12.598    | 12.699   | 12.824 | 1   | NO      |
| 222051 | 0.540 | 0.530 | 12.598    | 12.699   | 12.824 | 1   | NO      |
| 222060 | 0.400 | 0.368 | 14.013    | 14.354   | 14.517 | 4   | NO      |
| 222060 | 0.400 | 0.368 | 14.013    | 14.354   | 14.517 | 4   | NO      |
| 222062 | 0.640 | 0.610 | 11.566    | 11.883   | 11.989 | 1   | NO      |
| 222062 | 0.640 | 0.610 | 11.566    | 11.883   | 11.989 | 1   | NO      |
| 222069 | 0.620 | 0.630 | 11.778    | 11.673   | 11.774 | 1   | NO      |
| 222069 | 0.620 | 0.650 | 11.778    | 11.459   | 11.555 | 1   | NO      |
| 222076 | 0.590 | 0.570 | 12.090    | 12.295   | 12.410 | 1   | NO      |
| 222076 | 0.590 | 0.590 | 12.090    | 12.090   | 12.200 | 1   | NO      |
| 222084 | 0.570 | 0.680 | 12.295    | 11.129   | 11.218 | 1   | NO      |
| 222084 | 0.570 | 0.690 | 12.295    | 11.017   | 11.102 | 1   | YES     |
| 222095 | 0.540 | 0.530 | 12.598    | 12.699   | 12.824 | 1   | NO      |
| 222095 | 0.540 | 0.570 | 12.598    | 12.295   | 12.410 | 1   | NO      |
| 222098 | 0.650 | 0.660 | 11.459    | 11.350   | 11.444 | 1   | NO      |
| 222098 | 0.650 | 0.680 | 11.459    | 11.129   | 11.218 | 1   | NO      |
| 222102 | 0.378 | 0.370 | 14.248    | 14.327   | 14.490 | 4   | NO      |

Table A4: MCAS 2004–2005 Mathematics Grade 4 (cont.)

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 222102 | 0.378 | 0.368 | 14.248    | 14.354   | 14.517 | 4   | NO      |
| 222132 | 0.830 | 0.810 | 9.183     | 9.488    | 9.539  | 1   | NO      |
| 222132 | 0.830 | 0.830 | 9.183     | 9.183    | 9.227  | 1   | NO      |
| 222140 | 0.690 | 0.770 | 11.017    | 10.045   | 10.108 | 1   | NO      |
| 222140 | 0.690 | 0.760 | 11.017    | 10.175   | 10.241 | 1   | NO      |
| 222145 | 0.620 | 0.620 | 11.778    | 11.778   | 11.882 | 1   | NO      |
| 222145 | 0.620 | 0.640 | 11.778    | 11.566   | 11.665 | 1   | NO      |
| 222164 | 0.550 | 0.570 | 12.497    | 12.295   | 12.410 | 1   | NO      |
| 222164 | 0.550 | 0.580 | 12.497    | 12.192   | 12.305 | 1   | NO      |
| 222169 | 0.860 | 0.850 | 8.679     | 8.854    | 8.890  | 1   | NO      |
| 222169 | 0.860 | 0.870 | 8.679     | 8.494    | 8.522  | 1   | NO      |
| 222176 | 0.630 | 0.640 | 11.673    | 11.566   | 11.665 | 1   | NO      |
| 222176 | 0.630 | 0.680 | 11.673    | 11.129   | 11.218 | 1   | NO      |
| 222200 | 0.590 | 0.570 | 12.090    | 12.295   | 12.410 | 1   | NO      |
| 222200 | 0.590 | 0.600 | 12.090    | 11.987   | 12.095 | 1   | NO      |
| 222207 | 0.630 | 0.640 | 11.673    | 11.566   | 11.665 | 1   | NO      |
| 222207 | 0.630 | 0.660 | 11.673    | 11.350   | 11.444 | 1   | NO      |
| 222216 | 0.910 | 0.910 | 7.637     | 7.637    | 7.644  | 1   | NO      |
| 222216 | 0.910 | 0.910 | 7.637     | 7.637    | 7.644  | 1   | NO      |
| 227360 | 0.560 | 0.560 | 12.396    | 12.396   | 12.514 | 1   | NO      |
| 227360 | 0.560 | 0.580 | 12.396    | 12.192   | 12.305 | 1   | NO      |

# Appendix A

**Table A5: MCAS 2004–2005 Mathematics Grade 6**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 221879 | 0.520 | 0.490 | 12.799    | 13.100   | 13.274 | 1   | NO      |
| 221879 | 0.520 | 0.560 | 12.799    | 12.396   | 12.533 | 1   | NO      |
| 226186 | 0.720 | 0.690 | 10.669    | 11.017   | 11.080 | 1   | NO      |
| 226186 | 0.720 | 0.700 | 10.669    | 10.902   | 10.959 | 1   | NO      |
| 226187 | 0.660 | 0.740 | 11.350    | 10.427   | 10.458 | 1   | NO      |
| 226187 | 0.660 | 0.760 | 11.350    | 10.175   | 10.193 | 1   | YES     |
| 226188 | 0.365 | 0.385 | 14.381    | 14.170   | 14.401 | 4   | NO      |
| 226188 | 0.365 | 0.380 | 14.381    | 14.222   | 14.456 | 4   | NO      |
| 226191 | 0.700 | 0.660 | 10.902    | 11.350   | 11.431 | 1   | NO      |
| 226191 | 0.700 | 0.650 | 10.902    | 11.459   | 11.545 | 1   | NO      |
| 227424 | 0.680 | 0.600 | 11.129    | 11.987   | 12.101 | 1   | NO      |
| 227424 | 0.680 | 0.660 | 11.129    | 11.350   | 11.431 | 1   | NO      |
| 227430 | 0.530 | 0.480 | 12.699    | 13.201   | 13.380 | 1   | NO      |
| 227430 | 0.530 | 0.560 | 12.699    | 12.396   | 12.533 | 1   | NO      |
| 227447 | 0.480 | 0.570 | 13.201    | 12.295   | 12.426 | 1   | NO      |
| 227447 | 0.480 | 0.580 | 13.201    | 12.192   | 12.318 | 1   | NO      |
| 227450 | 0.460 | 0.530 | 13.402    | 12.699   | 12.852 | 1   | NO      |
| 227450 | 0.460 | 0.510 | 13.402    | 12.900   | 13.063 | 1   | NO      |
| 227457 | 0.690 | 0.680 | 11.017    | 11.129   | 11.198 | 1   | NO      |
| 227457 | 0.690 | 0.700 | 11.017    | 10.902   | 10.959 | 1   | NO      |
| 227465 | 0.590 | 0.600 | 12.090    | 11.987   | 12.101 | 1   | NO      |
| 227465 | 0.590 | 0.580 | 12.090    | 12.192   | 12.318 | 1   | NO      |
| 227470 | 0.630 | 0.600 | 11.673    | 11.987   | 12.101 | 1   | NO      |
| 227470 | 0.630 | 0.690 | 11.673    | 11.017   | 11.080 | 1   | NO      |
| 227473 | 0.680 | 0.690 | 11.129    | 11.017   | 11.080 | 1   | NO      |
| 227473 | 0.680 | 0.700 | 11.129    | 10.902   | 10.959 | 1   | NO      |
| 227484 | 0.415 | 0.433 | 13.859    | 13.680   | 13.885 | 4   | NO      |
| 227484 | 0.415 | 0.430 | 13.859    | 13.706   | 13.912 | 4   | NO      |
| 227492 | 0.860 | 0.860 | 8.679     | 8.679    | 8.617  | 1   | NO      |
| 227492 | 0.860 | 0.860 | 8.679     | 8.679    | 8.617  | 1   | NO      |
| 227497 | 0.640 | 0.610 | 11.566    | 11.883   | 11.992 | 1   | NO      |
| 227497 | 0.640 | 0.610 | 11.566    | 11.883   | 11.992 | 1   | NO      |
| 227499 | 0.750 | 0.760 | 10.302    | 10.175   | 10.193 | 1   | NO      |
| 227499 | 0.750 | 0.780 | 10.302    | 9.911    | 9.915  | 1   | NO      |
| 227504 | 0.670 | 0.660 | 11.240    | 11.350   | 11.431 | 1   | NO      |
| 227504 | 0.670 | 0.680 | 11.240    | 11.129   | 11.198 | 1   | NO      |
| 227514 | 0.600 | 0.620 | 11.987    | 11.778   | 11.882 | 1   | NO      |
| 227514 | 0.600 | 0.620 | 11.987    | 11.778   | 11.882 | 1   | NO      |
| 227519 | 0.423 | 0.433 | 13.782    | 13.680   | 13.885 | 4   | NO      |
| 227519 | 0.423 | 0.448 | 13.782    | 13.528   | 13.725 | 4   | NO      |
| 227529 | 0.810 | 0.800 | 9.488     | 9.634    | 9.623  | 1   | NO      |
| 227529 | 0.810 | 0.820 | 9.488     | 9.339    | 9.312  | 1   | NO      |
| 227535 | 0.700 | 0.640 | 10.902    | 11.566   | 11.658 | 1   | NO      |
| 227535 | 0.700 | 0.630 | 10.902    | 11.673   | 11.771 | 1   | NO      |
| 227537 | 0.700 | 0.730 | 10.902    | 10.549   | 10.587 | 1   | NO      |
| 227537 | 0.700 | 0.730 | 10.902    | 10.549   | 10.587 | 1   | NO      |
| 227704 | 0.810 | 0.790 | 9.488     | 9.774    | 9.771  | 1   | NO      |
| 227704 | 0.810 | 0.820 | 9.488     | 9.339    | 9.312  | 1   | NO      |
| 227709 | 0.830 | 0.830 | 9.183     | 9.183    | 9.149  | 1   | NO      |
| 227709 | 0.830 | 0.820 | 9.183     | 9.339    | 9.312  | 1   | NO      |
| 227711 | 0.323 | 0.375 | 14.843    | 14.275   | 14.511 | 4   | NO      |
| 227711 | 0.323 | 0.395 | 14.843    | 14.065   | 14.291 | 4   | NO      |
| 227715 | 0.510 | 0.510 | 12.900    | 12.900   | 13.063 | 1   | NO      |
| 227715 | 0.510 | 0.530 | 12.900    | 12.699   | 12.852 | 1   | NO      |
| 227716 | 0.410 | 0.400 | 13.910    | 14.013   | 14.236 | 1   | NO      |

Table A5: MCAS 2004–2005 Mathematics Grade 6 (cont.)

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 227716 | 0.410 | 0.420 | 13.910    | 13.808   | 14.019 | 1   | NO      |
| 227717 | 0.640 | 0.610 | 11.566    | 11.883   | 11.992 | 1   | NO      |
| 227717 | 0.640 | 0.590 | 11.566    | 12.090   | 12.210 | 1   | NO      |
| 227718 | 0.780 | 0.770 | 9.911     | 10.045   | 10.056 | 1   | NO      |
| 227718 | 0.780 | 0.780 | 9.911     | 9.911    | 9.915  | 1   | NO      |
| 227720 | 0.790 | 0.750 | 9.774     | 10.302   | 10.327 | 1   | NO      |
| 227720 | 0.790 | 0.780 | 9.774     | 9.911    | 9.915  | 1   | NO      |
| 227721 | 0.880 | 0.900 | 8.300     | 7.874    | 7.769  | 1   | NO      |
| 227721 | 0.880 | 0.900 | 8.300     | 7.874    | 7.769  | 1   | NO      |
| 227723 | 0.453 | 0.508 | 13.477    | 12.925   | 13.090 | 4   | NO      |
| 227723 | 0.453 | 0.510 | 13.477    | 12.900   | 13.063 | 4   | NO      |
| 227728 | 0.620 | 0.660 | 11.778    | 11.350   | 11.431 | 1   | NO      |
| 227728 | 0.620 | 0.650 | 11.778    | 11.459   | 11.545 | 1   | NO      |
| 227732 | 0.590 | 0.580 | 12.090    | 12.192   | 12.318 | 1   | NO      |
| 227732 | 0.590 | 0.620 | 12.090    | 11.778   | 11.882 | 1   | NO      |
| 227734 | 0.720 | 0.720 | 10.669    | 10.669   | 10.713 | 1   | NO      |
| 227734 | 0.720 | 0.720 | 10.669    | 10.669   | 10.713 | 1   | NO      |
| 227737 | 0.630 | 0.620 | 11.673    | 11.778   | 11.882 | 1   | NO      |
| 227737 | 0.630 | 0.640 | 11.673    | 11.566   | 11.658 | 1   | NO      |
| 227740 | 0.630 | 0.660 | 11.673    | 11.350   | 11.431 | 1   | NO      |
| 227740 | 0.630 | 0.650 | 11.673    | 11.459   | 11.545 | 1   | NO      |
| 227743 | 0.790 | 0.790 | 9.774     | 9.774    | 9.771  | 1   | NO      |
| 227743 | 0.790 | 0.780 | 9.774     | 9.911    | 9.915  | 1   | NO      |

## Appendix A

**Table A6: MCAS 2004–2005 Mathematics Grade 8**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 226912 | 0.440 | 0.440 | 13.604    | 13.604   | 13.673 | 1   | NO      |
| 226927 | 0.570 | 0.580 | 12.295    | 12.192   | 12.359 | 1   | NO      |
| 226933 | 0.450 | 0.430 | 13.503    | 13.706   | 13.768 | 1   | NO      |
| 226936 | 0.710 | 0.720 | 10.787    | 10.669   | 10.941 | 1   | NO      |
| 226948 | 0.510 | 0.520 | 12.900    | 12.799   | 12.924 | 1   | NO      |
| 226952 | 0.490 | 0.550 | 13.100    | 12.497   | 12.643 | 1   | NO      |
| 226976 | 0.730 | 0.730 | 10.549    | 10.549   | 10.829 | 1   | NO      |
| 226989 | 0.430 | 0.430 | 13.706    | 13.706   | 13.768 | 1   | NO      |
| 227750 | 0.320 | 0.300 | 14.871    | 15.098   | 15.064 | 1   | NO      |
| 227753 | 0.520 | 0.540 | 12.799    | 12.598   | 12.737 | 1   | NO      |
| 227785 | 0.510 | 0.520 | 12.900    | 12.799   | 12.924 | 1   | NO      |
| 227787 | 0.340 | 0.340 | 14.650    | 14.650   | 14.647 | 1   | NO      |
| 227792 | 0.763 | 0.768 | 10.143    | 10.077   | 10.391 | 4   | NO      |
| 227797 | 0.900 | 0.910 | 7.874     | 7.637    | 8.119  | 1   | NO      |
| 227801 | 0.590 | 0.560 | 12.090    | 12.396   | 12.549 | 1   | NO      |
| 227803 | 0.840 | 0.850 | 9.022     | 8.854    | 9.252  | 1   | NO      |
| 227806 | 0.540 | 0.650 | 12.598    | 11.459   | 11.676 | 4   | YES     |
| 227807 | 0.590 | 0.570 | 12.090    | 12.295   | 12.454 | 1   | NO      |
| 227808 | 0.550 | 0.550 | 12.497    | 12.497   | 12.643 | 1   | NO      |
| 227809 | 0.460 | 0.440 | 13.402    | 13.604   | 13.673 | 1   | NO      |
| 227810 | 0.525 | 0.553 | 12.749    | 12.472   | 12.620 | 4   | NO      |
| 227811 | 0.470 | 0.460 | 13.301    | 13.402   | 13.485 | 1   | NO      |
| 227812 | 0.320 | 0.320 | 14.871    | 14.871   | 14.853 | 1   | NO      |
| 227813 | 0.750 | 0.760 | 10.302    | 10.175   | 10.481 | 1   | NO      |
| 227814 | 0.650 | 0.640 | 11.459    | 11.566   | 11.776 | 1   | NO      |
| 227815 | 0.570 | 0.590 | 12.295    | 12.090   | 12.264 | 4   | NO      |
| 227817 | 0.750 | 0.830 | 10.302    | 9.183    | 9.558  | 1   | NO      |
| 227818 | 0.700 | 0.730 | 10.902    | 10.549   | 10.829 | 1   | NO      |
| 227819 | 0.570 | 0.590 | 12.295    | 12.090   | 12.264 | 1   | NO      |
| 227820 | 0.280 | 0.270 | 15.331    | 15.451   | 15.393 | 1   | NO      |
| 227822 | 0.283 | 0.278 | 15.302    | 15.361   | 15.309 | 4   | NO      |
| 227825 | 0.470 | 0.550 | 13.301    | 12.497   | 12.643 | 1   | NO      |
| 227826 | 0.460 | 0.450 | 13.402    | 13.503   | 13.579 | 1   | NO      |
| 227829 | 0.700 | 0.730 | 10.902    | 10.549   | 10.829 | 1   | NO      |
| 227830 | 0.450 | 0.500 | 13.503    | 13.000   | 13.111 | 1   | NO      |
| 227832 | 0.530 | 0.570 | 12.699    | 12.295   | 12.454 | 1   | NO      |
| 227833 | 0.820 | 0.850 | 9.339     | 8.854    | 9.252  | 1   | NO      |
| 227834 | 0.610 | 0.650 | 11.883    | 11.459   | 11.676 | 1   | NO      |
| 227836 | 0.340 | 0.330 | 14.650    | 14.760   | 14.749 | 1   | NO      |

Table A7: MCAS 2004–2005 Science and Technology/Engineering Grade 5

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 227352 | 0.640 | 0.610 | 11.566    | 11.883   | 11.847 | 1   | NO      |
| 227352 | 0.640 | 0.620 | 11.566    | 11.778   | 11.748 | 1   | NO      |
| 227356 | 0.560 | 0.530 | 12.396    | 12.699   | 12.625 | 1   | NO      |
| 227356 | 0.560 | 0.550 | 12.396    | 12.497   | 12.433 | 1   | NO      |
| 227421 | 0.830 | 0.890 | 9.183     | 8.094    | 8.238  | 1   | NO      |
| 227421 | 0.830 | 0.910 | 9.183     | 7.637    | 7.803  | 1   | YES     |
| 227816 | 0.770 | 0.720 | 10.045    | 10.669   | 10.691 | 1   | NO      |
| 227816 | 0.770 | 0.730 | 10.045    | 10.549   | 10.577 | 1   | NO      |
| 227821 | 0.800 | 0.770 | 9.634     | 10.045   | 10.096 | 1   | NO      |
| 227821 | 0.800 | 0.770 | 9.634     | 10.045   | 10.096 | 1   | NO      |
| 227823 | 0.590 | 0.510 | 12.090    | 12.900   | 12.816 | 1   | NO      |
| 227823 | 0.590 | 0.560 | 12.090    | 12.396   | 12.336 | 1   | NO      |
| 227824 | 0.730 | 0.730 | 10.549    | 10.549   | 10.577 | 1   | NO      |
| 227824 | 0.730 | 0.750 | 10.549    | 10.302   | 10.341 | 1   | NO      |
| 227827 | 0.820 | 0.850 | 9.339     | 8.854    | 8.962  | 1   | NO      |
| 227827 | 0.820 | 0.830 | 9.339     | 9.183    | 9.276  | 1   | NO      |
| 227828 | 0.643 | 0.620 | 11.539    | 11.778   | 11.748 | 4   | NO      |
| 227828 | 0.643 | 0.618 | 11.539    | 11.804   | 11.773 | 4   | NO      |
| 227831 | 0.830 | 0.810 | 9.183     | 9.488    | 9.566  | 1   | NO      |
| 227831 | 0.830 | 0.810 | 9.183     | 9.488    | 9.566  | 1   | NO      |
| 227835 | 0.820 | 0.830 | 9.339     | 9.183    | 9.276  | 1   | NO      |
| 227835 | 0.820 | 0.850 | 9.339     | 8.854    | 8.962  | 1   | NO      |
| 227837 | 0.720 | 0.700 | 10.669    | 10.902   | 10.913 | 1   | NO      |
| 227837 | 0.720 | 0.720 | 10.669    | 10.669   | 10.691 | 1   | NO      |
| 227838 | 0.840 | 0.860 | 9.022     | 8.679    | 8.795  | 1   | NO      |
| 227838 | 0.840 | 0.850 | 9.022     | 8.854    | 8.962  | 1   | NO      |
| 227839 | 0.800 | 0.770 | 9.634     | 10.045   | 10.096 | 1   | NO      |
| 227839 | 0.800 | 0.780 | 9.634     | 9.911    | 9.969  | 1   | NO      |
| 227840 | 0.750 | 0.750 | 10.302    | 10.302   | 10.341 | 1   | NO      |
| 227840 | 0.750 | 0.770 | 10.302    | 10.045   | 10.096 | 1   | NO      |
| 227842 | 0.770 | 0.750 | 10.045    | 10.302   | 10.341 | 1   | NO      |
| 227842 | 0.770 | 0.750 | 10.045    | 10.302   | 10.341 | 1   | NO      |
| 227843 | 0.508 | 0.453 | 12.925    | 13.477   | 13.366 | 4   | NO      |
| 227843 | 0.508 | 0.470 | 12.925    | 13.301   | 13.198 | 4   | NO      |
| 227844 | 0.820 | 0.810 | 9.339     | 9.488    | 9.566  | 1   | NO      |
| 227844 | 0.820 | 0.810 | 9.339     | 9.488    | 9.566  | 1   | NO      |
| 227845 | 0.400 | 0.410 | 14.013    | 13.910   | 13.779 | 1   | NO      |
| 227845 | 0.400 | 0.400 | 14.013    | 14.013   | 13.877 | 1   | NO      |
| 227846 | 0.460 | 0.440 | 13.402    | 13.604   | 13.487 | 1   | NO      |
| 227846 | 0.460 | 0.440 | 13.402    | 13.604   | 13.487 | 1   | NO      |
| 227847 | 0.400 | 0.400 | 14.013    | 14.013   | 13.877 | 4   | NO      |
| 227847 | 0.400 | 0.415 | 14.013    | 13.859   | 13.730 | 4   | NO      |
| 227848 | 0.540 | 0.540 | 12.598    | 12.598   | 12.529 | 1   | NO      |
| 227848 | 0.540 | 0.540 | 12.598    | 12.598   | 12.529 | 1   | NO      |
| 227852 | 0.680 | 0.710 | 11.129    | 10.787   | 10.803 | 1   | NO      |
| 227852 | 0.680 | 0.710 | 11.129    | 10.787   | 10.803 | 1   | NO      |
| 227854 | 0.450 | 0.485 | 13.503    | 13.150   | 13.055 | 4   | NO      |
| 227854 | 0.450 | 0.493 | 13.503    | 13.075   | 12.983 | 4   | NO      |
| 227858 | 0.680 | 0.680 | 11.129    | 11.129   | 11.129 | 1   | NO      |
| 227858 | 0.680 | 0.700 | 11.129    | 10.902   | 10.913 | 1   | NO      |
| 227859 | 0.850 | 0.840 | 8.854     | 9.022    | 9.122  | 1   | NO      |
| 227859 | 0.850 | 0.860 | 8.854     | 8.679    | 8.795  | 1   | NO      |
| 227861 | 0.800 | 0.810 | 9.634     | 9.488    | 9.566  | 1   | NO      |
| 227861 | 0.800 | 0.820 | 9.634     | 9.339    | 9.424  | 1   | NO      |
| 227863 | 0.560 | 0.600 | 12.396    | 11.987   | 11.946 | 1   | NO      |

## Appendix A

**Table A7: MCAS 2004–2005 Science and Technology/Engineering Grade 5 (cont.)**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 227863 | 0.560 | 0.610 | 12.396    | 11.883   | 11.847 | 1   | NO      |
| 227866 | 0.760 | 0.770 | 10.175    | 10.045   | 10.096 | 1   | NO      |
| 227866 | 0.760 | 0.760 | 10.175    | 10.175   | 10.220 | 1   | NO      |
| 227868 | 0.550 | 0.570 | 12.497    | 12.295   | 12.240 | 1   | NO      |
| 227868 | 0.550 | 0.570 | 12.497    | 12.295   | 12.240 | 1   | NO      |
| 227874 | 0.730 | 0.720 | 10.549    | 10.669   | 10.691 | 1   | NO      |
| 227874 | 0.730 | 0.710 | 10.549    | 10.787   | 10.803 | 1   | NO      |
| 227876 | 0.840 | 0.830 | 9.022     | 9.183    | 9.276  | 1   | NO      |
| 227876 | 0.840 | 0.820 | 9.022     | 9.339    | 9.424  | 1   | NO      |
| 227877 | 0.700 | 0.750 | 10.902    | 10.302   | 10.341 | 1   | NO      |
| 227877 | 0.700 | 0.730 | 10.902    | 10.549   | 10.577 | 1   | NO      |
| 227878 | 0.720 | 0.730 | 10.669    | 10.549   | 10.577 | 1   | NO      |
| 227878 | 0.720 | 0.760 | 10.669    | 10.175   | 10.220 | 1   | NO      |
| 227882 | 0.653 | 0.650 | 11.432    | 11.459   | 11.443 | 4   | NO      |
| 227882 | 0.653 | 0.635 | 11.432    | 11.620   | 11.597 | 4   | NO      |
| 227883 | 0.820 | 0.830 | 9.339     | 9.183    | 9.276  | 1   | NO      |
| 227883 | 0.820 | 0.840 | 9.339     | 9.022    | 9.122  | 1   | NO      |
| 227884 | 0.760 | 0.730 | 10.175    | 10.549   | 10.577 | 1   | NO      |
| 227884 | 0.760 | 0.740 | 10.175    | 10.427   | 10.460 | 1   | NO      |

Table A8: MCAS 2004–2005 Science and Technology/Engineering Grade 8

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 226407 | 0.810 | 0.790 | 9.488     | 9.774    | 9.646  | 1   | NO      |
| 226407 | 0.810 | 0.810 | 9.488     | 9.488    | 9.358  | 1   | NO      |
| 226410 | 0.670 | 0.610 | 11.240    | 11.883   | 11.771 | 1   | NO      |
| 226410 | 0.670 | 0.640 | 11.240    | 11.566   | 11.452 | 1   | NO      |
| 226420 | 0.770 | 0.750 | 10.045    | 10.302   | 10.178 | 1   | NO      |
| 226420 | 0.770 | 0.780 | 10.045    | 9.911    | 9.784  | 1   | NO      |
| 227898 | 0.770 | 0.720 | 10.045    | 10.669   | 10.548 | 1   | NO      |
| 227898 | 0.770 | 0.730 | 10.045    | 10.549   | 10.427 | 1   | NO      |
| 227899 | 0.590 | 0.580 | 12.090    | 12.192   | 12.083 | 1   | NO      |
| 227899 | 0.590 | 0.600 | 12.090    | 11.987   | 11.876 | 1   | NO      |
| 227900 | 0.460 | 0.450 | 13.402    | 13.503   | 13.403 | 1   | NO      |
| 227900 | 0.460 | 0.460 | 13.402    | 13.402   | 13.301 | 1   | NO      |
| 227910 | 0.760 | 0.740 | 10.175    | 10.427   | 10.304 | 1   | NO      |
| 227910 | 0.760 | 0.770 | 10.175    | 10.045   | 9.919  | 1   | NO      |
| 227911 | 0.500 | 0.420 | 13.000    | 13.808   | 13.710 | 4   | NO      |
| 227911 | 0.500 | 0.448 | 13.000    | 13.528   | 13.429 | 4   | NO      |
| 227912 | 0.750 | 0.700 | 10.302    | 10.902   | 10.783 | 1   | NO      |
| 227912 | 0.750 | 0.720 | 10.302    | 10.669   | 10.548 | 1   | NO      |
| 227913 | 0.810 | 0.750 | 9.488     | 10.302   | 10.178 | 1   | NO      |
| 227913 | 0.810 | 0.770 | 9.488     | 10.045   | 9.919  | 1   | NO      |
| 227927 | 0.660 | 0.660 | 11.350    | 11.350   | 11.234 | 1   | NO      |
| 227927 | 0.660 | 0.650 | 11.350    | 11.459   | 11.344 | 1   | NO      |
| 227933 | 0.760 | 0.760 | 10.175    | 10.175   | 10.050 | 1   | NO      |
| 227933 | 0.760 | 0.760 | 10.175    | 10.175   | 10.050 | 1   | NO      |
| 227935 | 0.550 | 0.530 | 12.497    | 12.699   | 12.593 | 1   | NO      |
| 227935 | 0.550 | 0.550 | 12.497    | 12.497   | 12.390 | 1   | NO      |
| 227942 | 0.470 | 0.640 | 13.301    | 11.566   | 11.452 | 1   | YES     |
| 227942 | 0.470 | 0.650 | 13.301    | 11.459   | 11.344 | 1   | YES     |
| 227944 | 0.740 | 0.770 | 10.427    | 10.045   | 9.919  | 1   | NO      |
| 227944 | 0.740 | 0.780 | 10.427    | 9.911    | 9.784  | 1   | NO      |
| 227949 | 0.680 | 0.670 | 11.129    | 11.240   | 11.124 | 1   | NO      |
| 227949 | 0.680 | 0.650 | 11.129    | 11.459   | 11.344 | 1   | NO      |
| 227954 | 0.365 | 0.403 | 14.381    | 13.988   | 13.892 | 4   | NO      |
| 227954 | 0.365 | 0.405 | 14.381    | 13.962   | 13.866 | 4   | NO      |
| 227956 | 0.530 | 0.550 | 12.699    | 12.497   | 12.390 | 1   | NO      |
| 227956 | 0.530 | 0.550 | 12.699    | 12.497   | 12.390 | 1   | NO      |
| 227959 | 0.720 | 0.760 | 10.669    | 10.175   | 10.050 | 1   | NO      |
| 227959 | 0.720 | 0.770 | 10.669    | 10.045   | 9.919  | 1   | NO      |
| 227960 | 0.715 | 0.578 | 10.728    | 12.218   | 12.109 | 4   | NO      |
| 227960 | 0.715 | 0.573 | 10.728    | 12.269   | 12.160 | 4   | NO      |
| 227961 | 0.710 | 0.720 | 10.787    | 10.669   | 10.548 | 1   | NO      |
| 227961 | 0.710 | 0.730 | 10.787    | 10.549   | 10.427 | 1   | NO      |
| 227963 | 0.520 | 0.500 | 12.799    | 13.000   | 12.897 | 1   | NO      |
| 227963 | 0.520 | 0.510 | 12.799    | 12.900   | 12.796 | 1   | NO      |
| 227964 | 0.780 | 0.770 | 9.911     | 10.045   | 9.919  | 1   | NO      |
| 227964 | 0.780 | 0.770 | 9.911     | 10.045   | 9.919  | 1   | NO      |
| 227965 | 0.718 | 0.743 | 10.698    | 10.396   | 10.273 | 4   | NO      |
| 227965 | 0.718 | 0.718 | 10.698    | 10.698   | 10.577 | 4   | NO      |
| 227968 | 0.510 | 0.500 | 12.900    | 13.000   | 12.897 | 1   | NO      |
| 227968 | 0.510 | 0.490 | 12.900    | 13.100   | 12.998 | 1   | NO      |
| 227971 | 0.660 | 0.640 | 11.350    | 11.566   | 11.452 | 1   | NO      |
| 227971 | 0.660 | 0.680 | 11.350    | 11.129   | 11.012 | 1   | NO      |
| 227973 | 0.630 | 0.590 | 11.673    | 12.090   | 11.980 | 1   | NO      |
| 227973 | 0.630 | 0.610 | 11.673    | 11.883   | 11.771 | 1   | NO      |
| 227975 | 0.550 | 0.530 | 12.497    | 12.699   | 12.593 | 1   | NO      |

## Appendix A

**Table A8: MCAS 2004–2005 Science and Technology/Engineering Grade 8 (cont.)**

| IREF   | OLDP  | NEWP  | OLDDDELTA | NEWDELTA | LINE   | MAX | DISCARD |
|--------|-------|-------|-----------|----------|--------|-----|---------|
| 227975 | 0.550 | 0.530 | 12.497    | 12.699   | 12.593 | 1   | NO      |
| 227978 | 0.800 | 0.790 | 9.634     | 9.774    | 9.646  | 1   | NO      |
| 227978 | 0.800 | 0.800 | 9.634     | 9.634    | 9.505  | 1   | NO      |
| 227980 | 0.720 | 0.710 | 10.669    | 10.787   | 10.666 | 1   | NO      |
| 227980 | 0.720 | 0.720 | 10.669    | 10.669   | 10.548 | 1   | NO      |
| 227981 | 0.650 | 0.620 | 11.459    | 11.778   | 11.665 | 1   | NO      |
| 227981 | 0.650 | 0.640 | 11.459    | 11.566   | 11.452 | 1   | NO      |
| 227983 | 0.510 | 0.490 | 12.900    | 13.100   | 12.998 | 1   | NO      |
| 227983 | 0.510 | 0.510 | 12.900    | 12.900   | 12.796 | 1   | NO      |
| 227985 | 0.530 | 0.550 | 12.699    | 12.497   | 12.390 | 1   | NO      |
| 227985 | 0.530 | 0.550 | 12.699    | 12.497   | 12.390 | 1   | NO      |
| 227986 | 0.610 | 0.610 | 11.883    | 11.883   | 11.771 | 1   | NO      |
| 227986 | 0.610 | 0.620 | 11.883    | 11.778   | 11.665 | 1   | NO      |
| 227989 | 0.750 | 0.710 | 10.302    | 10.787   | 10.666 | 1   | NO      |
| 227989 | 0.750 | 0.730 | 10.302    | 10.549   | 10.427 | 1   | NO      |
| 227991 | 0.450 | 0.373 | 13.503    | 14.301   | 14.208 | 4   | NO      |
| 227991 | 0.450 | 0.365 | 13.503    | 14.381   | 14.288 | 4   | NO      |
| 227993 | 0.880 | 0.860 | 8.300     | 8.679    | 8.542  | 1   | NO      |
| 227993 | 0.880 | 0.870 | 8.300     | 8.494    | 8.357  | 1   | NO      |
| 227994 | 0.410 | 0.370 | 13.910    | 14.327   | 14.234 | 1   | NO      |
| 227994 | 0.410 | 0.380 | 13.910    | 14.222   | 14.128 | 1   | NO      |