**MPS8:11 Summative Scoring Guide**

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 1. | A |  | 1 | N2C | 1 | A | Apply properties of operations to integers. (DOK2) |

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| 2. | D |  | 1 | N2C | 1 | B | Perform the order of operations correctly (DOK2) |

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| 3. | C |  | 1 | A2A | 2 | A | Translate words into algebraic expressions and equations by using correct algebraic notation (DOK3) |

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| 4. | A |  | 1 | N2C | 1 | B | Perform order of operations correctly. (DOK2) |

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 5. |  | x | 2 | N2C | 1 | A | Apply properties of operations to integers. (DOK2) |

Correct answer: Example: 1 (10) = 10

2 points Exemplary response; correct use of property, use of two numbers

1 point 1 of the above criteria

0 point none of the above criteria

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| 6. | D |  | 1 | N2C | 1 | A | Apply properties of operations to integers. (DOK2) |

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| 7. | C |  | 1 | N2C | 1 | C | Recognize and use properties to solve problems (DOK2) |

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| 8. | D |  | 1 | N2C | 1 | C | Recognize and use properties to solve problems (DOK2) |

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 9. |  | x | 2 | N2C | 1 | A | Apply properties of operations to integers. (DOK2) |

Correct answer: 5 · 2 = 2 · 5

2 points Exemplary response; correct use of property, use of two given numbers

1 point 1 of the above criteria

0 point none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 10. |  | x | 3 | N2C | 1 | B | Perform order of operations correctly. (DOK2) |

Answer: 10

3 points Exemplary response; correct answer, all steps complete, all steps correct

2 point 2 of the above criteria

1 point 1 of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 11. |  | x | 3 | N2C | 1 | C | Recognize and use properties to solve problems (DOK2) |

Correct answer: $10, 458.83

213964÷52 = 4133.92

4133.92(2.53) = 10458.83

3 points Exemplary response; correct answer, complete steps for work, correct computation

2 point 2 of the above criteria

1 point 1 of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 12. |  | x | 3 | N2C | 1 | C | Recognize and use properties to solve problems (DOK2) |

Correct answer: $2.50

12 – 7 = 5 ; 5/2 = 2.5

3 points Exemplary response; correct answer, complete work, correct computation

2 points 2 of the above criteria

1 point 1 of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 13. |  | x | 2 | N2C | 1 | A | Apply properties of operations to integers. (DOK2) |

Answer: Example: Distributive property: 8 ( 3 + 2 ) = 8 · 3 + 8 · 2

Associative property: (8 · 3 ) · 2 = 8 · ( 3 · 2)

Distributive property involves multiplication AND addition/subtraction. Associative property involves all multiplication or all addition.

2 points Exemplary response; correct use of properties correct explanation of difference

1 point one of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 14. |  | x | 2 | N2C | 2 | A | Translate words into algebraic expressions and equations by using correct algebraic notation. (DOK3) |

Answer: 56 / x = 7

2 points Exemplary response; correct use of division and correct form for equation

1 point one of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 15. |  | x | 2 | A2A | 2 | B | Solve equations using integers. (DOK3) |

Answer: x = - 7

2 points Exemplaryresponse; correct answer, correct work

1 point one of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 16. |  | x | 1 | A2A | 2 | B | Solve equations using integers (DOK3) |

Answer: x = - 20

2 points Exemplary response; correct answer, correct work

1 point one of the above criteria

0 points none of the above criteria

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 17. |  | x | 3 | A2A | 2 | B | Solve equations using integers (DOK3) |

Answer 23 x = 115; x = 5 months

3 points: Exemplary response; correct equation, correct work, correct answer

2 points 2 of the above criteria correct

1 point 1 of the above criteria correct

0 points none of the above criteria correct

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| ITEM# | SR | CR | PT | GLE | OBJ | EXP | DESCRIPTOR |
| 18. |  | x | 3 | A2A | 2 | B | Solve equations using integers (DOK3) |

Answer: d – 15 = 68; d = 83 people

3 points Exemplary response; correct equation, correct work, correct answer

2 points 2 of the above criteria correct

1 point 1 of the above criteria correct

0 points none of the above criteria correct