Review Questions: Equations, Formulae and Inequations

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| 1. The solution to the equation 3*m* = 18, is *m* = |
| |  |  | | --- | --- | |  | 21 | |  | 54 | |  | 15 | |  | 6 | |

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| 1. The solution to the equation 3*a* − 6 = −15, is *a* = |
| |  |  | | --- | --- | |  | −9 | |  | −7 | |  | 3 | |  | −3 | |  | 9 | |

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| 1. I think of a number *n*, add 6 and multiply it by 4 to get a result of −8. The value of *n* must have been ... |
| |  |  | | --- | --- | |  | −4 | |  | −8 | |  | −12 | |  | 8 | |  | 12 | |  | 4 | |

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| 1. The solution to the equation 4*p* − 12 = −8, is *p* = \_\_\_\_\_. |
| |  |  | | --- | --- | |  | 3 | |  | 4 | |  | 6 | |  | 1 | |  | 5 | |

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| 1. Choose the correct symbol to complete the statement 62 − 5 \_\_\_\_\_ 8 × 4. |
| |  |  | | --- | --- | |  | = | |  | <= | |  | < | |  | >= | |  | > | |

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| 1. I think of a number *n*, multiply it by 4 and subtract 3 to get a result of −7. The value of *n* must have been ... |
| |  |  | | --- | --- | |  | −1 | |  | 1 | |  | −2.5 | |  | 2.5 | |  | −16 | |  | 16 | |

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| 1. I think of a number *n*, multiply it by 5 and add 3 to get a result of 18. The equation that fits this process is ... |
| |  |  | | --- | --- | |  | 5(*n* + 3) = 18 | |  | 3*n* + 5 = 18 | |  | 5*n* + 3 = 18 | |  | 3(*n* + 5) = 18 | |

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| 1. The solution to the equation 2(*x* + 3) + 3*x* = 21, is *x* = ... |
| |  |  | | --- | --- | |  | 4 | |  | 3 | |  | −2 | |  | −4 | |  | −3 | |  | 2 | |
| 1. Match each operation on the left with its opposite operation on the right.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Using the pull-down menus, match each item in the left column to the corresponding item in the right column.* | | | | | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | |  |  | | --- | --- | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | A | addition | |  | | | B | subtraction | |  | | | C | multiplication | |  | | | D | division | |  | | |  | | **11.1**addition |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **11.2**subtraction |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **11.3**multiplication |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **11.4**division |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | |

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| 1. Match each operation on the left with its inverse (opposite) operation on the right.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Using the pull-down menus, match each item in the left column to the corresponding item in the right column.* | | | | | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | |  |  | | --- | --- | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | A | divide by 4 | |  | | | B | multiply by 4 | |  | | | C | add 4 | |  | | | D | subtract 4 | |  | | |  | | **12.1**add 4 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **12.2**subtract 4 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **12.3**multiply by 4 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **12.4**divide by 4 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | |

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| 1. Match each equation on the left with its solution on the right.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Using the pull-down menus, match each item in the left column to the corresponding item in the right column.* | | | | | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | |  |  | | --- | --- | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | A | *b* = 12 | |  | | | B | *b* = 5 | |  | | | C | *b* = 32 | |  | | | D | *b* = 6 | |  | | | E | *b* = 7 | |  | | |  | | **13.1**5*b* = 30 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **13.2** |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **13.3**7*b* − 4 = 31 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **13.4**5(*b* − 7) = 0 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **13.5** |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | |

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| 1. If I am *y* years old now, in ten years time I will be \_\_\_\_\_ years of age. |
| |  |  | | --- | --- | |  | *y* + 10 | |  | 10 − *y* | |  | 10*y* | |  | *y* − 10 | |  | *y* + *y* | |

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| 1. Samar has Dhs *d* in her bank account. She withdraws Dhs 100 then doubles the balance the next time she gets paid. Her balance could then be written as \_\_\_\_\_. |
| |  |  | | --- | --- | |  | 2*d* − 100 | |  | 2 × 100 − *d* | |  | *d* − 100 × 2 | |  | 2(*d* − 100) | |  | 2(100 − *d*) | |

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| 1. When I paid for 3 identical T-shirts with a Dhs 50 note, I received Dhs 8 change. If *T* represents the value of a T-shirt, the equation that does not fit this statement is ... |
| |  |  | | --- | --- | |  | 3*T* + 8 = 50 | |  | 50 − 3*T* = 8 | |  | 50 − 8 = 3*T* | |  | 3(*T* + 8) = 50 | |  | *T* = (50 − 8) ⁄ 3 | |

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| 1. The solution to the inequation *m* + 6 < 2 is ... |
| |  |  | | --- | --- | |  | *m* < −4 | |  | *m* < −8 | |  | *m* > 4 | |  | *m* > −4 | |  | *m* > 8 | |  | *m* < 4 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1. Match each equation on the left with its solution on the right.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Using the pull-down menus, match each item in the left column to the corresponding item in the right column.* | | | | | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | |  |  | | --- | --- | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | A | *x* = 1 | |  | | | B | *x* = 0 | |  | | | C | *x* = 2 | |  | | | D |  | |  | | | E | *x* = −1 | |  | | | F | *x* = −5 | |  | | |  | | **19.1**2(*x* − 3) = −6 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **19.2**3(*x* + 2) = 12 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **19.3**9(*x* + 2) = 9 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **19.4**8(2*x* + 3) = 32 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **19.5**4(3*x* + 1) = 16 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **19.6**5(2*x* + 3) = −35 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | |

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| 1. The solution to the inequation 2(*b* − 4) > 6 is ... |
| |  |  | | --- | --- | |  | *b* < 7 | |  | *b* < −7 | |  | *b* > 7 | |  | *b* > −7 | |

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| 1. The solution to the inequation 2*m* − 5 < 13 is ... |
| |  |  | | --- | --- | |  | *m* < 9 | |  | *m* > 9 | |  | *m* > −9 | |  | *m* > 4 | |  | *m* > −4 | |  | *m* < 4 | |

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| 1. A value of *x* that fits the inequation 2*x* − 1 < −5 is \_\_\_\_\_. |
| |  |  | | --- | --- | |  | −5 | |  | −2 | |  | 0 | |  | 5 | |  | 2 | |

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| 1. Match each statement on the left with its correct expression on the right.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | *Using the pull-down menus, match each item in the left column to the corresponding item in the right column.* | | | | | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | |  |  | | --- | --- | | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif | | | A | *a* = *b* + 1 | |  | | | B | *a* = *b* −1 | |  | | | C | *b* < *a* < 1 | |  | | | D | 1 < *b* < *a* | |  | | | E | *a* > *b* | |  | | | F | *a* < *b* | |  | | |  | | **25.1***a* is less than *b* |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **25.2***a* is more than *b* |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **25.3***b* is between 1 and *a* |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **25.4***a* is between *b* and 1 |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **25.5***a* is one more than *b* |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | | **25.6***a* is one less than *b* |  |  | G:\2015-2016\10\launch_book\cw8\uaensm8\uaensm8\media\styles\90\_skins_\A\australia_school\pixel.gif |  | |  | | | |  | |