GCSE Higher - Powers

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| 1. |  | Write these expressions using power notation:  |
|  | a) | 2 x 2 x 2 x2  |  | b) | 5 x 5 x 5x 5 x 5 x 5 |
|  | c) | 12 |  | d) | 0.1 x 0.1 x 0.1 x 0.1 x 0.1 x 0.1 x 0.1 |

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| 2. |  | Find the values of:  |
|  | a) | 92 |  | b) | 104 |
|  | c) | 0.13 |  | d) | 100 |
|  | e) | (-1) 3 |  | f) | (-1) 10 |

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| 3. |  | Find the values of:  |
|  | a) | 22 x 32 |  | b) | 52 x 92 |
|  | c) | 33 x 72 |  | d) | 24 x 32 x 5 |
|  | e) | 22  22 |  | f) | 52  90 |
|  | g) | 33  34 |  | h) | (22 )3 |

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| 4. |  | Write the following as fractions:  |
|  | a) | 3-2 |  | b) | 10-4 |
|  | c) | 4-3 |  | d) | n-6 |
|  | e) | x-y |  | f) | 3x-2 |
|  | g) |  |  | h) |  |

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| 5. |  | Write the following in negative index form:  |
|  | a) |  |  | b) |  |
|  | c) |  |  | d) |  |
|  | e) |  |  | f) |  |

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| 6. |  | Simplify the following:  |
|  | a) |  |  | b) |  |
|  | c) |  |  | d) |  |

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| 7. |  | Find the value of the following: |
|  | a) |  |  | b) |  |
|  | c) |  |  | d) |  |
|  | e) |  |  | f) |  |
|  | g) |  |  | h) |  |
|  | i) |  |  | j) |  |