



Polynomial Algebra - Difference of Exponents (Variables) Divided by Second Exponent - Solve

1 Find the value of x without using a calculator

$$\frac{x^{279} - x^{278}}{x^{278}} = 16$$

- | | | | |
|---|--------|---|--------|
| A | x = 18 | B | x = 25 |
| C | x = 20 | D | x = 14 |
| E | x = 17 | F | x = 23 |

2 Find the value of n without using a calculator

$$\frac{n^{486} - n^{485}}{n^{485}} = 6$$

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|---|--------|---|-------|
| A | n = 13 | B | n = 6 |
| C | n = 8 | D | n = 5 |
| E | n = 3 | F | n = 7 |

3 Find the value of x without using a calculator

$$\frac{x^{298} + x^{297}}{x^{297}} = 16$$

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|---|--------|---|--------|
| A | x = 16 | B | x = 17 |
| C | x = 9 | D | x = 14 |
| E | x = 15 | F | x = 10 |

4 Find the value of y without using a calculator

$$\frac{y^{451} + y^{450}}{y^{450}} = 9$$

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|---|--------|---|--------|
| A | y = 2 | B | y = 17 |
| C | y = 11 | D | y = 6 |
| E | y = 16 | F | y = 8 |

5 Find the value of m without using a calculator

$$\frac{m^{306} - m^{305}}{m^{305}} = 11$$

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|---|--------|---|--------|
| A | m = 2 | B | m = 12 |
| C | m = 11 | D | m = 18 |
| E | m = 4 | F | m = 7 |

6 Find the value of m without using a calculator

$$\frac{m^{146} + m^{145}}{m^{145}} = 10$$

- | | | | |
|---|--------|---|--------|
| A | m = 6 | B | m = 14 |
| C | m = 12 | D | m = 9 |
| E | m = 3 | F | m = 1 |

7 Find the value of d without using a calculator

$$\frac{d^{210} + d^{209}}{d^{209}} = 7$$

- | | | | |
|---|--------|---|--------|
| A | d = 8 | B | d = 6 |
| C | d = 4 | D | d = 10 |
| E | d = 15 | F | d = 9 |

8 Find the value of m without using a calculator

$$\frac{m^{347} - m^{346}}{m^{346}} = 22$$

- | | | | |
|---|--------|---|--------|
| A | m = 33 | B | m = 23 |
| C | m = 17 | D | m = 35 |
| E | m = 19 | F | m = 29 |