# Exponent properties worksheet 2. 2

The product of Powers Property :P roduktet of two forces with the same base corresponds to the base raised to the sum of the exponet. If x is a real number without zero and m and n is integer, it is Avg. xn = xm+nExtly expand:34 ⁵ 35 = 34+534 ⁵ 35 = 39Power of a power property :A power raised to another force corresponds to the base raised to the product by the exponeents. If x is a real number that is not zero and m and n is integer, there is nothing that is integer, and then (xm)n = xmnExample :(32)4 = 32 ⁸ 4(32)4 = 38Cancere for a product property : A product raised to a force corresponds to the product of each factor raised to this power. If x and y are some nonzero real numbers and m are some integer, so (xy) m = xm ⁵ ymExample :(3 ⁵ 5)2 = 32 ⁵ 52 (3 ⁵ 5) 2 = 9 ⁵ 25 (3 ⁵ 5 ) 2 = 225.Quotient of Powers Property : Quotient for two non-zero forces with the same base corresponds to the base raised to the difference of the ecponetic. If x is some nonzero reel number and m and n are integer, daxm ÷ xn = xm-nExample:37 ÷ 35 = 37-537 ÷ 35 = 32Positive Power of a Quotient Property : A quotient raised to a positive force corresponds to the quotient of each base raised to this power. If x and y are some nonzero real numbers and m are a positive integer, then (x / y) m = xm / ymExample :(3 / 5) 2 = 32 / 52 = 9 / 25Negative Power of a quotient property : A quotient raised to a negative force corresponds to the mutual of quotient raised to opposite (positive) power. If x and y are some nonzero real numbers and m is a positive integer, then(x / y)-m = (y / x)m = ym / xmExample :(3/2)-2 = (2/3)2 = 22/32 = 4/9 Some additional properties for exponeent Property 1 : If a term is moved from counter to denominator or mention to counter, the character on the exponent must be changed. The isx-m = 1/xmExample:3-2 = 1/323-2 = 1/9Property 2:For any non-null base, if the exponent is zero, the value is 1. That isx0 = 1Example :30 = 1Property 3 :For any base, if it is not exponent, the exponent is believed to be 1.That isx = x1Example:31 = 3Property 4 :If an exponent is transferred from one side of the equation to the other side of the equation, it must be taken mutually by the exponent. That isxm/n = y -----> x = yn/mExample :x1/2 = 3x = 32/1x = 32x = 9Property 5:If two forces are similar with the same base, exoquity can be equated. That isax = ay -----> x = yExample:3m = 35 -----> m = 3Property 6:If two forces equal the same exponent, bases can be equated. That isxa = ya -----> x = yExample :k3 = 53 -----> k = 5 Practice Problems Problem 1 :Simplify : 2m2 Avg. 2m3Solution :2m2 ⁵ 2m3 = 2m2 ⁵ 2m32m2 ⁵ 2m3 = 4m(2+3)2m2 ⁵ 2m3 = 4m5Problem 2 :Simplify :m4 ⁵ 2m-3Solution :m4 Avg. 2m-3 = m4 ⁵ 2m-3m4 Avg. 2m-3 = 2m(4 - 3)m4 ⁵ 2m-3 = 2m1m4 ⁵ 2m-3 = 2mProblem 3 :Simplify :(4a 2 :((4a3)2 //2=42(a3)2(4a3)2 = 16a(3)(2)(4a3)2 = 16a6Problem 4 :Simplify : (x3)0Solution :(x3)0 = 1 Problem 5 :Simplify : (12a3b2) / (3a4b3)Solution :(12a3b2) / (3a4b3) = (12/3)a3-4b2-3(12a3b2) / (3a4b3) = / (3a4b3) = 4 / (a1b1)(12a3b2) / (3a4b3) = 4 / (ab) Apart from the stuff stuff above, if you need other things in mathematics, please use our google custom search here. If you have feedback about our math content, please email us: v4formath@gmail.comWe always appreciate your feedback. You can also visit the following websites on different things in mathematics. WORD PROBLEMSHCF and LCM word problemsSmell problems on simple equations Word problems on linear equations Word problems on square equationsAlgebra word problemsWord problems on trainsSes and perimeter word problemsWord problems on direct variation and reverse variation Word problems on device priceWord problems on device frequency Word problems on comparing pricesConvert common devices word problems Convert metric units word problemsWord problems on simple interestWord problems on compound interestWord issues at types of angles Complementary and supplementary angles word problemsDou databear word problemsTrigonometry word problemsPercentage word problems Problems Result word problems Markup and markdown word problems Decimal word problemsWord problems on fractionsWord problems on mixed fractrionsA step equation word problemsLinear differences word problemsRatio and relationship word problemsTime and work word problemsStand problems on sets and friend chartsWord problems at agesPytagoreic theorem word problemsPercention of a number word problemsSMall problems on constant speedWord problems at average speed Word problems at the sum of angles of a triangle are 180 degreeS OTHER TOPICS Result shortcutsScreation shortcutsTimetable shortcutsTime , speed and distance shortcutsRatio and proportion shortcutsDomain and range of rational functionsDomain and variety of rational functionsDomain and variety of rational functions with holesGrafer rational functionsGrafr rational functions with holesConvert repeated decimals in tilesDecimal representation of rational numbersFind square root using long divisionL.C.M method of solving time and work problemsTransferring the word problems in albraic expressions Remainder when 2 power 256 is divided by 17Remainder when 17 power 23 is divided by 16Sum of all three-digit numbers that can be divided by 6Sum of all three-digit numbers that can be divided by 7Sum of all three digit numbers that can be divided by 8Sum of all three-digit numbers formed using 1, 1.3 Km 2 , 4Sum of all three four-digit numbers formed with non-zero digitSum of all three four-digit numbers formed using 0 , 1, 2, 3Sum of all three four-digit numbers formed using 1, 2, 5, 6 copyright onlinemath4all.com SBI! -- Note: The above information will not be sent to the printer - - Fill in the blanks on the table under Power Base Exponent Repeated multiplication value 3 5 3 5 x 3 x 3 x 3 x 3 243 5 3 5 5 x 5 x 5 x 5 x 5 x 3 5 125 2 4 2 4 2 x 2 x 2 x 2 16 2 5 2 5 2 x 2 x 2 x 2 x 2 32 3 3 3 3 3 x 3 x 3 27 Which is bigger? Circle the larger Power 2 6 or 2 8 3 4 or 2 4 7 3 or 7 2 4 9 or 5 9 Complete the table below by typing the forces using either numbers Word. 4-5 5 Two to eighth power 2 8 More power 6 4 Five to third power 5 3 — Note: The information below this point will not be sent to your printer – Elementary Algebra spreadsheet – By HelpingWithMath.com You are here: Home → Spreadsheet → Exposes Create an unlimited supply of spreadsheets to practice exosterism and powers. Students can resolve simple expressions involving exponekter, such as 33, (1/2)4, (-5)0 or 8-2, or write multiplication expressions using an exponent. The spreadsheets can be done in html or PDF format (both are easy to print). The options include negative and zero exposures, and the use of fractions, decimals, or negative numbers as bases. You can also create worksheets that have another operation in addition to exponentiality (add/pull/multiply/split powers). These spreadsheets are most useful in sixth, seventh, and eighth grades, when expone centers are introduced and practiced. Note: Variables with expone agents are not included (for example, practiced in an algebra course). Basic instructions for the worksheets Each worksheet is generated randomly and thus uniquely. The answer key is generated automatically and placed on the other side of the file. You can generate your spreadsheets in either html or PDF format — both are easy to print. To get the PDF worksheet, just press the button titled Create PDF or Create PDF Spreadsheet. To get the worksheet in html format, tap the View button in the browser or Create html spreadsheet. This has the advantage that you can save the spreadsheet directly from your browser (select File → Save) and then edit it in Word or other word processor. Sometimes the generated worksheet is not exactly what you want. Just try again! To get another worksheet using the same options: PDF format: come back to this page and press the button again. Html format: only refresh the worksheet page in the browser window. Below are some common spreadsheet types in both html and PDF formats. They are randomly generated so uniquely every time. The answer key is automatically included on the other side. To get a different spreadsheet using the same options, tap refresh in the browser window (only when you appear in your browser). Scroll down the page to the generator to customize the spreadsheets yourself. Font: Times New Roman Arial Courier Courier New Helvetica sans-serif Verdana Font Size: 8pt 10pt 12pt 14pt 16pt 16pt 24pt 36pt Extra space during problems: 0 1 2 3 4 5 6 lines Extra title and instructions (HTML allowed): The book has 300 pages packed with curriculum-based activities and exercises in each, with a focus on mathematics and language art. 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