

Name: \_\_\_\_\_

## Exponents with Decimal Bases

Evaluate each expression.

a.  $0.5^2$  \_\_\_\_\_

b.  $0.2^3$  \_\_\_\_\_

c.  $1.4^4$  \_\_\_\_\_

d.  $2.3^3$  \_\_\_\_\_



# Preview

Please log in to download  
the printable version of this worksheet.

i. Write the expression as an exponent.

$3.4 \times 3.4 \times 3.4$  \_\_\_\_\_

j. Which exponent is approximately 80? (circle one)

$9.1^2$

$2.9^2$

$7^2$

Tell how you could figure out this answer without a calculator.

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# ANSWER KEY

## Exponents with Decimal Bases

Evaluate each expression.

a.  $0.5^2$  0.25

b.  $0.2^3$  0.008

c.  $1.4^4$  3.8416

d.  $2.3^3$  12.167



# Preview

Please log in to download  
the printable version of this worksheet.

i. Write the expression as an exponent.

$3.4 \times 3.4 \times 3.4$   $3.4^3$

j. Which exponent is approximately 80? (circle one)

$9.1^2$

$2.9^2$

$7^2$

Tell how you could figure out this answer without a calculator.

**You can round each decimal and use mental math to square it.**

**$9^2 = 81$ ,  $3^2 = 9$ , and  $7^2 = 49$ . Therefore  $9.1^2$  is closest to 80.**