

Warm-Up October 9, 2019

	Repeated multiplication	Base	Power	Evaluate
A.	$-6 \times -6 - 6$	-6	$(-6)^3$	-216
B.	$-(-2)(-2)(-2)$	-2	$-(-2)^3$	8
C.	$-1 \times 1 \times 1 \times 1$	1	-1^4	-1

2. Write as a repeated multiplication and evaluate

A. $-(-5)^4 - (-5 \times -5 \times -5 \times -5)$
 -625

B. $-3^6 - (3 \times 3 \times 3 \times 3 \times 3 \times 3)$
 $-729 - 3 \times 3 \times 3 \times 3 \times 3 \times 3$

C. $(-4)^3$
 $-4 \times -4 \times -4$
 -64

3. Write the following as a power: 64 [two different ways]

$4^3 = 64$ 2^6 64^1 8^2

4. Write as a repeated multiplication and evaluate

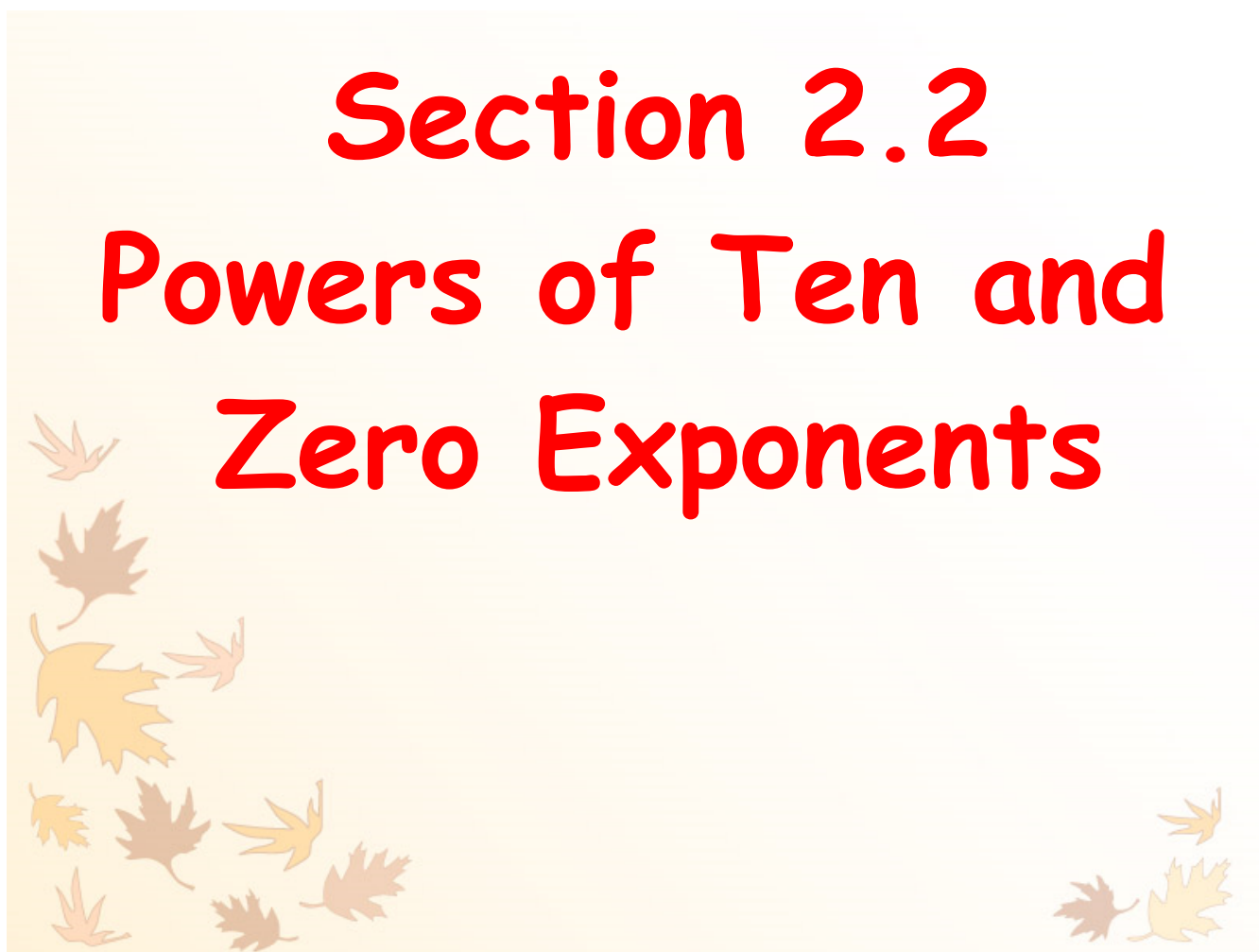
$-(-5)^2$

$-(-5 \times -5)$

-25

Section 2.2

Powers of Ten and Zero Exponents



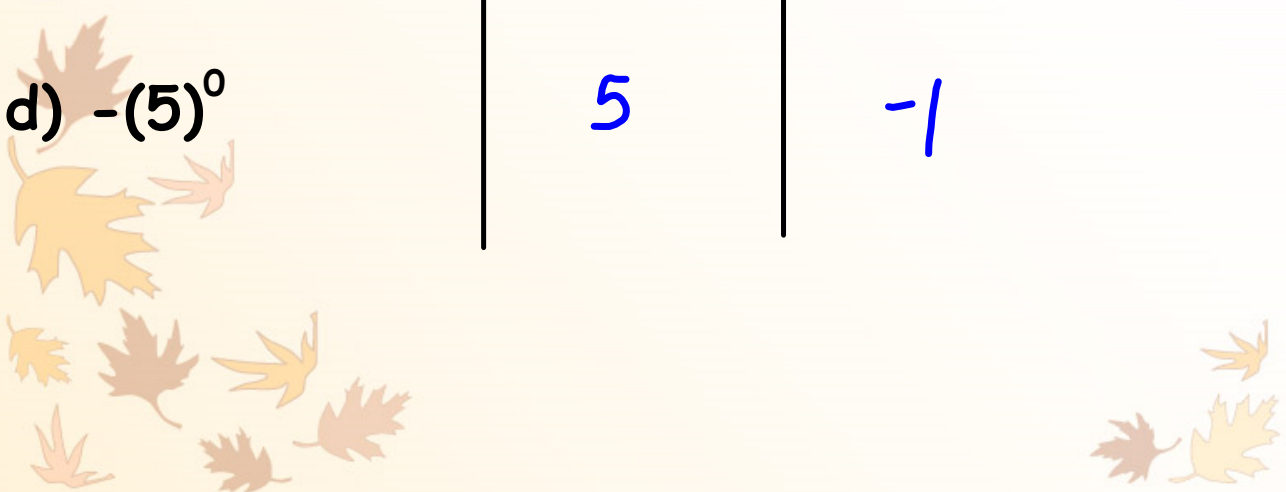
Zero Exponent Law

A power with an ^(positive/negative) integer base, other than 0, and an exponent of 0 is equal to 1

$$42^0$$



Power	Base	Evaluate
a) -5^0	5	-1
b) $(-2)^0$	-2	1
c) $-(-62)^0$	-62	-1
d) $-(5)^0$	5	-1



Write each of the following using a base of 10:

A. 100 000

$$10^5$$

← equals the number of zeros.

B. 1 000 000 000

$$10^9$$

C. 1

$$10^0$$

D. 100

$$10^2$$

E. 10

$$10^1$$

Write 2 650 328 as a power of 10

Expanded form

$$2\,000\,000 + 600\,000 + 50\,000 + 3\,000 + 200 + 8$$

Power of

10

$$2 \times 10^6 + 6 \times 10^5 + 5 \times 10^4 + 3 \times 10^3 + 2 \times 10^2 + 8 \times 10^0$$

40 203

Expanded
form

$$40000 + 200 + 3$$

Power of
10

$$4 \times 10^4 + 2 \times 10^2 + 3 \times 10^0$$

Write in standard form

**[ALWAYS LOOK AT THE BASE 10 AND
START WITH THE HIGHEST
EXPONENT!]**

$$3 \times 10^2 + 6 \times 10^4 + 2 \times 10^0 + 3 \times 10^5$$

$$3 \times 10^5 + 6 \times 10^4 + 3 \times 10^2 + 2 \times 10^0$$

$$360302$$

$$360\ 302$$

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Answers...Page 474

#4) Put in a chart
#5)

Power	Evaluate
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6, 8, 9[a,c,e], 10 all

↓
 $10^5 = 100\ 000$

Worksheet Questions

When finished: read or do page 69

Questions 1-6

