

Warm-Up

October 4, 2018

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

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

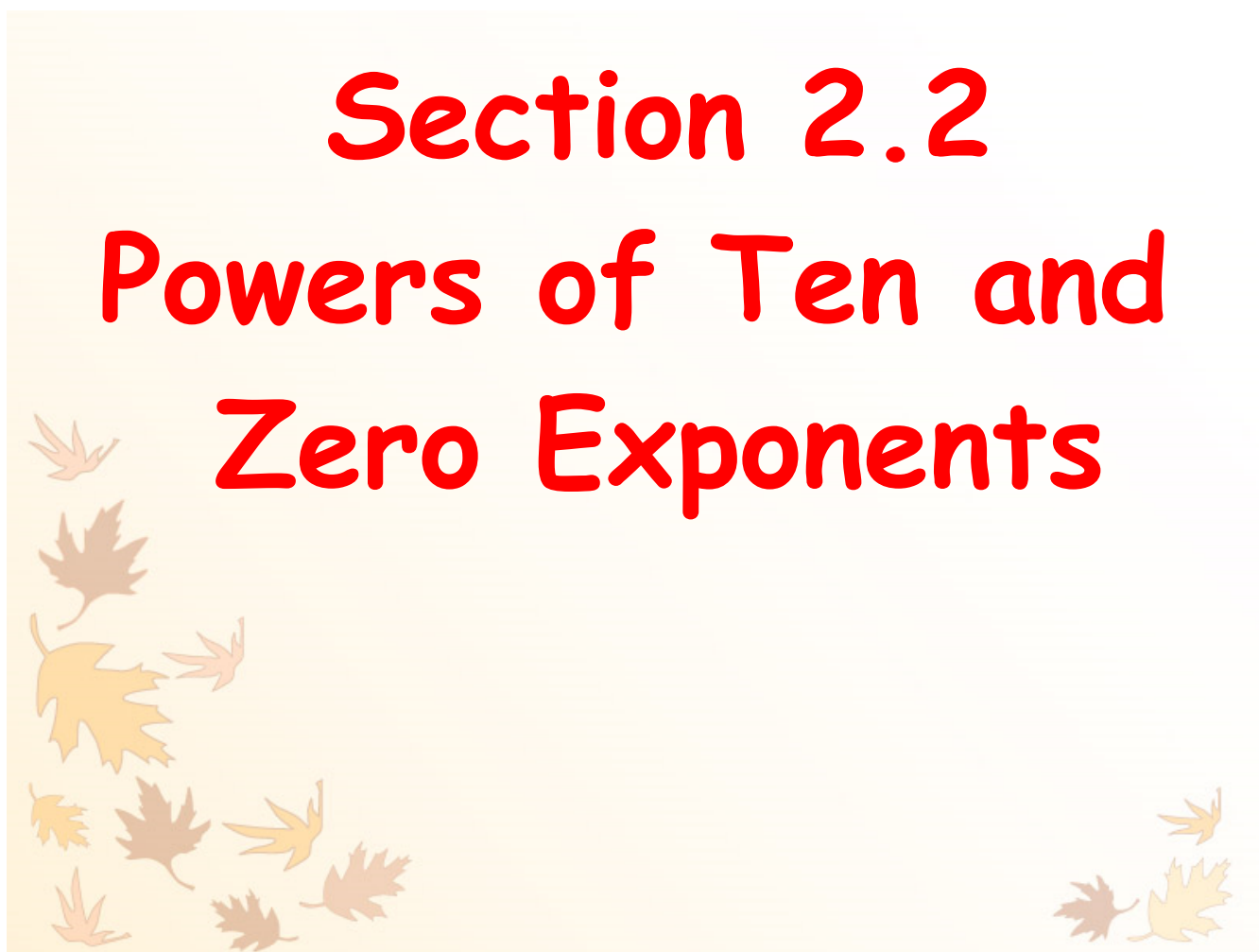
3. Write the following as a power: 64 [two different ways]

2^6 $(-2)^6$ $8^2 = 64$ $4^3 = 64$ $-(-4)^3$

4. Write as a repeated multiplication and evaluate $-(-5)^2$

Section 2.2

Powers of Ten and Zero Exponents




Zero Exponent Law

A power with an integer base, other than 0, and an exponent of 0 is equal to 1



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 $10 \times 10 \times 10 \times 10$

B. 1 000 000 000 10^9 1×10^9

C. 1 10^0

D. 100 1×10^2 10^2

E. 10 10^1

Write 2 650 328 as a power of 10

Expanded form

$$2\ 000\ 000 + 600\ 000 + 50\ 000 + 300 + 20 + 8$$

Power of

10

$$2 \times 10^6 + 6 \times 10^5 + 5 \times 10^4 + 3 \times 10^2 + 2 \times 10^1 + 8 \times 10^0$$

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!]**

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

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

8 060 303

8060303

8 060 303

Homework Page 61-62

Answers...Page 474

#4 } Put in a chart
#5 }

Power	Evaluate

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

↓
 $10^5 = 100\ 000$

Worksheet Questions

When finished: read or do page 69 →

Questions 1-6

