

Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Block: \_\_\_\_\_

**Titan Learning Center  
Mathematics ACT Prep  
Set A Week 2**

Solve each problem, circling the correct answers. Remember that figures are not necessarily drawn to scale.

1. Jorge's current hourly wage for working at Denti Smiles is \$12.00. Jorge was told that at the beginning of next month, his new hourly wage will be an increase of 6% of his current hourly wage. What will be Jorge's new hourly wage?

F. \$12.06  
G. \$12.60  
H. \$12.72  
J. \$18.00  
K. \$19.20

2. The first term is 1 in the geometric sequence 1, -3, 9, -27, ... What is the SEVENTH term of the geometric sequence?

A. -243  
B. -30  
C. 81  
D. 189  
E. 729

3. The length of a rectangle with area 54 square centimeters is 9 centimeters. What is the perimeter of the rectangle, in centimeters?

F. 6  
G. 12  
H. 15  
J. 24  
K. 30

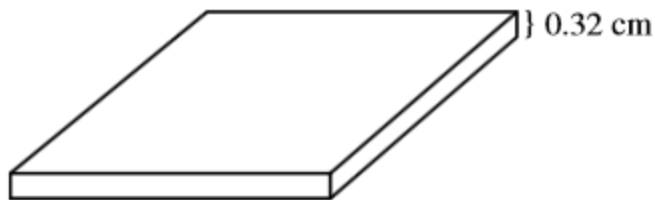
4. The shipping rate for customers of Ship Quick consists of a fee per box and a price per pound for each box. The table below gives the fee and the price per pound for customers shipping boxes of various weights.

Weight of box (pounds)	Fee	Price per pound
Less than 10	\$ 5.00	\$1.00
10–25	\$10.00	\$0.65
More than 25	\$20.00	\$0.30

Gregg wants Ship Quick to ship 1 box that weighs 15 pounds. What is the shipping rate for this box?

- F. \$ 9.75
- G. \$16.50
- H. \$19.75
- J. \$20.00
- K. \$24.50

5. A computer chip 0.32 cm thick is made up of layers of silicon. If the top and bottom layers are each 0.03 cm thick and the inner layers are each 0.02 cm thick, how many inner layers are there?



- A. 13
- B. 15
- C. 16
- D. 52
- E. 64

**TLC Stamp**



