5A.1b **Learning Opportunity**
Integer Operations

Name: _____

What Is the Best Way To Become an Astronaut?

Choose the correct answer for each exercise and circle the number-letter pair next to it. Write the letter in the matching numbered box at the bottom of the page.

Set 1. Simplify.

a. $12 + (5 - 9)$

b. $-7(-1 + 8)$

c. $20 - (-3) + 15$

d. $(-5)(-4)(-18)$

e. $16 - (-3 - 8)$

f. $[-2 - (-9)] + 75$

Set 1 Answers

26 • S	27	19 • T	−420
23 • J	−45	21 • E	38
16 • D	8	9 • F	92
14 • A	82	8 • C	−49
30 • B	30	5 • O	−360

Set 2. Simplify.

a. $(-3 \cdot 4) + (-4 \cdot 3)$

b. $(21 - 30)(-12 + 1)$

c. $(-5)^3(-1)^{10}$

d. $100 - (-50) + (-25)$

e. $(-30 - 30) \div (-5)$

f. $(-64 \div 8) + (-81 \div 9)$

Set 2 Answers

19 • A	99	2 • O	−125
30 • E	12	28 • I	110
12 • T	−20	23 • U	−24
18 • R	−9	15 • N	−17
9 • H	125	24 • S	15

Set 3. Simplify.

a. $\frac{-13 + 5}{13 - 15}$

b. $(-2)^4(-10)^2$

c. $\frac{(-8)(-8)}{-8 + (-8)}$

d. $\frac{-140}{14} + \frac{140}{-10}$

e. $5(-3)^3$

f. $\frac{-77}{-7} - \frac{99}{-99}$

Set 3 Answers

4 • D	−30	10 • O	4
12 • L	−4	24 • P	−135
18 • T	12	20 • V	−140
11 • R	15	28 • A	1600
1 • G	−24	29 • G	2000

Set 4. Evaluate if $a = -5$, $b = -8$, and $c = 2$.

a. abc

b. $3a - b$

c. $\frac{-a^2 + 1}{4c}$

d. $2b - (-c)$

e. $cb^2 + a$

f. $\frac{(ac)^3}{5b}$

Set 4 Answers

11 • O	−7	6 • N	−20
20 • K	123	7 • S	−14
25 • E	130	27 • P	25
4 • T	80	22 • R	−11
17 • I	−80	29 • C	−3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30