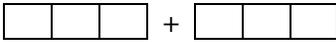
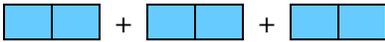
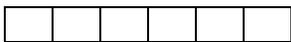
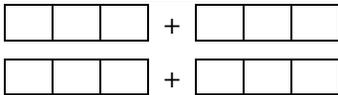
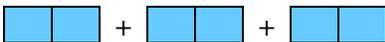


INTEGER PRACTICE QUIZ (SOLUTIONS)

1. Interpret each expression in terms of *gains* and *losses*. Then write in simplest form and evaluate. 25/25

| <i>Expression</i>       | <i>Interpretation in Terms of Gains and Losses</i>                                 | <i>Simplified Form of Expression</i> | <i>Answer</i> |
|-------------------------|--|--------------------------------------|---------------|
| (a) $-1 - (-3)$         | A <i>loss of 1</i> followed by a <i>gain of 3</i>                                  | $-1 + 3$                             | 2             |
| (b) $(-6) + (+12)$      | A <i>loss of 6</i> followed by a <i>gain of 12</i>                                 | $-6 + 12$                            | 6             |
| (c) $(-1) + (-46)$      | A <i>loss of 1</i> followed by a <i>loss of 46</i>                                 | $-1 - 46$                            | -47           |
| (d) $(+18) - (+41)$     | A <i>gain of 18</i> followed by a <i>loss of 41</i>                                | $18 - 41$                            | -23           |
| (e) $48 - (-31)$        | A <i>gain of 48</i> followed by a <i>gain of 31</i>                                | $48 + 31$                            | 79            |
| (f) $-38 - 30$          | A <i>loss of 38</i> followed by a <i>loss of 30</i>                                | $-38 - 30$                           | -68           |
| (g) $16 + (-19) - (-1)$ | A <i>gain of 16</i> followed by a <i>loss of 19</i> followed by a <i>gain of 1</i> | $16 - 19 + 1$                        | -2            |

2. Interpret each expression in terms of groups. Then represent the expression with a diagram and evaluate. 12/12

| <i>Expression</i> | <i>Interpretation in Terms of Groups</i>                                   | <i>Diagram</i>  | <i>Answer</i> |
|-------------------|--|---|---------------|
| (a) $2(-3)$       | <i>2 groups</i> of -3  |  | -6            |
| (b) $3(2)$        | <i>3 groups</i> of 2   |  | 6             |
| (c) $(-1)(6)$     | <i>6 groups</i> of -1 OR <i>1 group</i> of -6<br>OR <i>-1 groups</i> of 6  |  | -6            |
| (d) $(4)(-3)$     | <i>4 groups</i> of -3  |  | -12           |
| (e) $-3(4)$       | <i>4 groups</i> of -3 OR <i>3 groups</i> of -4<br>OR <i>-3 groups</i> of 4 | Same as previous one.   | -12           |
| (f) $-3(-2)$      | <i>-3 groups</i> of -2 OR <i>3 groups</i> of 2                             |  | 6             |

3. Interpret each expression in terms of groups. Then evaluate. 6/6

| <i>Expression</i>   | <i>Interpretation in Terms of Groups</i>       | <i>Answer</i> |
|---------------------|--|---------------|
| (a) $12 \div (-3)$  | <i>How many groups</i> of -3 are there in 12?  | -4            |
| (b) $-6 \div 2$     | <i>How many groups</i> of 3 are there in -6?   | -2            |
| (c) $14 \div 7$     | <i>How many groups</i> of 7 are there in 14?   | 2             |
| (d) $-81 \div (-9)$ | <i>How many groups</i> of -9 are there in -81? | 9             |