CHAPTER 1

INTEGERS

More Questions for Practice

1. Find:

(*a*) $(-8) \times 2$ (*b*) $(-4) \times 0$ (*c*) $4 \times (-1)$ (*d*) $(-5) \times (-1)$

(*e*) $7 \times (-3)$ (*f*) $(-9) \times (-9)$ (*g*) $0 \times (-13)$ (*h*) $(-1) \times 1$

2. Find:

(*a*) $3 \div (-3)$ (*b*) $(-5) \div 1$ (*c*) $7 \div (-7)$ (*d*) $(-15) \div (-3)$

(*e*) $70 \div (-10)$ (*f*) $9 \div (-9)$ (*g*) $0 \div (-3)$ (*h*) $0 \div 3$

3. Verify each of the following, for $a = -3$, $b = 2$ and $c = 4$:

(*a*) $a \times b = b \times a$ (*b*) $a \times (b \times c) = (a \times b) \times c$

(*c*) $a \times (b + c) = (a \times b) + (a \times c)$

4. Insert appropriate sign out of >, < or = in each of the following:

(*a*) $7 \times (-3) \square 21$ (*b*) $(-5) \times (-2) \square -10$ (*c*) $(-8) \times 2 \square -15$ (*d*) $(-8) \times (-5) \square 0$

5. Simplify:

(*a*) $[(-36) \div 12] \times [24 \div (-6)] - (-3)$ (*b*) $[(-2) \times 7 - 4] \div [(-12) \div 2] + 1$

6. Let $*$ be defined as follow:

$a * b = a \times (-b) - 2$, where $a, b \in$ I.

Using this definition, determine each of the following:

(*a*) $5 * (-6)$ (*b*) $(-8) * (-3)$ (*c*) $9 * (-7)$

7. Check each of the following for $a = 9$, $b = -3$ and $c = 3$, and write if 'True' or 'Not true':

(*a*) $(a \div b) \div c = a \div (b \div c)$ (*b*) $a \div (b + c) = (a \div b) + (a \div c)$

8. Simplify:

(*a*) $[(-3) \times 5 + \{9 \div (-3)\} - 5] \times [(-2) \times 3]$

(*b*) $6 \div [\{(-5) \div 5\} + 2] + [(-3) \times 2]$

ANSWERS

1. (*a*) –16 (*b*) 0 (*c*) –4 (*d*) 5 (*e*) –21 (*f*) 81 (*g*) 0 (*h*) –1

2. (*a*) –1 (*b*) –5 (*c*) –1 (*d*) 5 (*e*) –7 (*f*) –1 (*g*) 0 (*h*) 0

4. (*a*) < (*b*) > (*c*) < (*d*) >

5. (*a*) 15 (*b*) 4

6. (*a*) 28 (*b*) –26 (*c*) 61

7. (*a*) Not true (*b*) Not true

8. (*a*) 138 (*b*) 0.