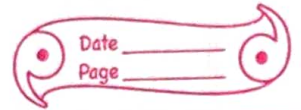


HW  
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# Integers Worksheet



1. (c)  $(-11) \times (-7)$

2. (d) 43

3. (e) 1

4. (d)  $(-8) \times (-3) - (-8) \times (-4)$

5. (c)  $(-25) \times 6 \times 4$

6. (c)  $(-9) \times (-5) \times (-6) \times 3$

7. (d)  $(-32) \div 4$

8. (e)  $(-1) \times (-1) \times (-1)$

9. (c)  ~~$(-6) \times 1$~~   $(-6, 1)$

10. (a)  $(-1, -2)$

11. (i)  $427 \times 8 + 2 \times 427$

$= 427 \times (8+2)$  [∵ DUMOA]

$= 427 \times 10$

$= 4270$

~~11~~ (ii)  $394 \times 12 + 394 \times (-2)$

$= 394 \times [12 + (-2)]$  [∵ DUMOA]

$= 394 \times 10$

$= 3940$

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$$12. (i) 37 \times \{8 + (-3)\} = 37 \times 8 + 37 \times (-3)$$

$$\begin{aligned} \text{LHS} &= 37 \times \{8 + (-3)\} \quad [\because \text{DUMOA}] \\ &= 37 \times 5 \\ &= 185 \end{aligned}$$

$$\begin{array}{r} 37 \\ \times 5 \\ \hline 185 \end{array}$$

$$\begin{aligned} \text{RHS} &= 37 \times 8 + 37 \times (-3) \quad [\because \text{DUMOA}] \\ &= 296 + (-111) \\ &= 185 \end{aligned}$$

$$\begin{array}{r} 37 \\ \times 8 \\ \hline 296 \end{array}$$

Yes, LHS = RHS. (proved)

$$12. (ii) (-82) \times \{(-4) + 19\} = (-82) \times (-4) + (-82) \times 19$$

$$\begin{aligned} \text{LHS} &= (-82) \times \{(-4) + 19\} \quad [\because \text{DUMOA}] \\ &= (-82) \times 15 \\ &= (-1230) \end{aligned}$$

$$\begin{array}{r} 246 \\ -111 \\ \hline 185 \end{array}$$

$$\begin{array}{r} 82 \\ \times 15 \\ \hline 1230 \end{array}$$

$$\begin{aligned} \text{RHS} &= (-82) \times (-4) + (-82) \times 19 \quad [\because \text{DUMOA}] \\ &= 328 + (-1558) \\ &= (-1230) \end{aligned}$$

$$\begin{array}{r} 82 \\ \times 4 \\ \hline 328 \end{array}$$

Yes, LHS = RHS. (proved)

$$\begin{array}{r} 82 \\ \times 19 \\ \hline 738 \\ +82 \\ \hline 1558 \end{array}$$

13. total no of integers = 18

$$\begin{array}{r} 1558 \\ -328 \\ \hline 1230 \end{array}$$

(i) Out of 18 integers if 15 of them are negative then, the sign of the product will be negative.

(ii) Out of 18 integers if 12 of them are negative then, the sign of the product will be positive.

(iii) Out of 18 integers if 9 of them are negative then, the sign of the product will be negative.

(iv) If all of them are negative, then, the sign of the product will be positive.

$$14.(i) \quad 42 \div 7 + 4 \qquad 15) \quad 45 - [38 - \{60 \div 3 - (6 - 9 \div 3) \div 3\}]$$

$$= 6 + 4$$

$$= 10$$

$$= 45 - [38 - \{60 \div 3 - (6 - 3) \div 3\}]$$

$$= 45 - [38 - \{60 \div 3 - 3 \div 3\}]$$

$$= 45 - [38 - \{20 - 1\}]$$

$$(ii) \quad 12 + 18 \div 3$$

$$= 45 - [38 - 19]$$

$$= 45 - 19$$

$$= 26$$

$$\begin{array}{r} 2 \times 18 \\ 36 \\ 12 \\ \hline 48 \end{array} = 12 + 6$$

$$\begin{array}{r} 38 \\ 19 \\ \hline 57 \end{array} = 18$$

$$16(ii) \quad 19 - 20 \div 4$$

$$\begin{array}{r} 19 \\ 20 \\ \hline 39 \end{array} = 19 - 5$$

$$\begin{array}{r} 15 \\ 45 \\ \hline 60 \end{array} = 14$$

$$\begin{array}{r} 19 \\ 26 \\ \hline 45 \end{array}$$

$$(iv) \quad 16 - 5 \times 3 + 4$$

$$= 16 - 15 + 4$$

$$= 16 - 15 + 4$$

$$= 16 - 19$$

$$= 16 + 4 - 19$$

$$= (-3)$$

$$= 20 - 19$$

$$= 1$$

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$$16 \cdot 88 - \{5 - (-48) \div (-16)\}$$

$$= 88 - \{5 - 3\}$$

$$= 88 - 2$$

$$= 86$$

17. product of  $(-13), (-17) = 221$

$$\begin{array}{r}
 13 \\
 \times 17 \\
 \hline
 91 \\
 + 130 \\
 \hline
 221
 \end{array}$$

quotient of  $(-187), 11 = (-17)$

$$\begin{array}{r}
 17 \\
 \overline{) 187} \\
 \underline{-110} \\
 77 \\
 \underline{-77} \\
 0
 \end{array}$$

$$221 + (-17)$$

$$= 221 - 17$$

$$= 204$$

$$\begin{array}{r} 221 \\ -17 \\ \hline 204 \end{array}$$