

RUNNING NOTES

Integers

Teacher's handwritten notes, typed

IN THESE NOTES

Addition of Integers

Multiplication of integers

Divisions

Index

Addition of Integers	3
Multiplication of integers	5
Divisions	5

[diagram: number line from -4 to 4 with jump arcs between consecutive integers]

Integers = -3, -2, -1, 0, 1, 2, 3, -----

Addition of Integers:

$$5 + 8 = 13$$

$$-5 - 8 = -(5 + 8) = -13$$

$$-5 + 8 = +(8 - 5) = +3$$

$$5 - 8 = -(8 - 5) = -3$$

Exs: $17 + 18 = 35$

$$-17 - 18 = -35$$

$$-17 + 18 = +1 = 1$$

$$17 - 18 = -1$$

$$18 + 17 = 35$$

$$18 (-) 17 = 1$$

$$18 (-) 17 = 1$$

Ex $234 + 79 = 313$

$$-146 - 238 = -384$$

$$46 - 128 = -82$$

$$-79 + 115 = 36$$

H.W $2379 + 467 =$

$$-7301 - 58012 =$$

$$-34201 + 5832 =$$

$$-153 + 392 =$$

$$234 + 79 = 313$$

$$238 + 146 = 384$$

$$128 (-) 46 = 82$$

$$115 (-) 79 = 36$$

Ans 313

-384

-82

36

Ex 1) $3196 - 528 = 2668$

2) $31532 - 4369 = \underline{\hspace{2cm}}$

Sol ① $3196 (-) 528 = 2668$

② $31532 (-) 4369 = 27163$

Ans 2668

Ans 27164
27963

27163 ✓

Ex $-347 + 168 = -179$

Sol

Ex $-789 - 1369 = -2158$

Sol

$347 (-) 168 = 179$

$347 \rightarrow 200 (147), 200 \rightarrow 168 (32): 147 + 32$

$1369 + 789 = 2158$

| $\rightarrow 23 + 59 - 32 - 94 = \underline{\hspace{2cm}}$

$= 82 - 126$

$= -44$

$94 + 32 = 126$

$59 + 23 = 82$

$126 (-) 82 = 44$

Ex $57 - 123 + 248 - 39 = \underline{\hspace{2cm}}$

$= 305 - 162$

$= 143$

H.W $\rightarrow$ ① $247 + 72 - 138 - 59 = \underline{\hspace{2cm}}$

② $168 - 79 + 234 - 349 = \underline{\hspace{2cm}}$

③ $1238 - 1784 + 342 = \underline{\hspace{2cm}}$

$248 + 57 = 305$

$123 + 39 = 162$

$305 (-) 162 = 143$

Multiplication of integers

Rule: $+$ $\times$ $+$ $=$ $+$

$-$ $\times$ $-$ $=$ $+$

$+$ $\times$ $-$ $=$ $-$

$-$ $\times$ $+$ $=$ $-$

Ex: $4 \times 5 = 20$

$-4 \times -5 = 20$

$4 \times -5 = -20$

$-4 \times 5 = -20$

Ex: $6 \times 7 = 42$

$-6 \times -7 = 42$

$6 \times -7 = -42$

$-6 \times 7 = -42$

Exs: $7 \times 12 =$

$-3 \times -8 =$

$-13 \times 15 =$

$17 \times -8 =$

Ans 84

Ans 24

-195

-136

Ex $-12 \times -143 = +1716$

$-96 \times 58 = -5568$

Ans 1716 (1616 X)

Ans -5568

5518 X

$143 \times 12 = 1716$

96×58 : 768, 4800, 5568

Divisions

Rule $+/+ = +$

$-/- = +$

$+/- = -$

$-/+ = -$

Exs 1) $\frac{2478}{2} = 1239$

2) $-2133/-3 = +711$

3) $101010/-2 = -50505$

4) $-\frac{5328}{4} = -1332$

Ex $37105/-5 = -7421$

H.W Additions

$5 + 8 =$

$-7 - 12 =$

$-13 + 18 =$

$-18 + 7 =$

Multiplications

$5 \times 8 =$

$-7 \times -12 =$

$-13 \times 18 =$

$-18 \times 7 =$

Divisions

$\frac{2478}{2} =$

$-30531/-3 =$

$-\frac{46028}{4} =$

$36105/-5 =$