**ĐỀ CƯƠNG ÔN TẬP TOÁN SỐ 2**

**Bài 1:** Thực hiện phép tính:

a) ( -125) . 25 . ( -32) . ( -4) b) ( -2) 5 . ( -25) . 5 . ( - 4) c) [164 – ( 12 . 5 + 4)] : 4 + 46

d) 7 + 15 : [55 – 2( 3 . 12 -11)] e) 25 . 29 + 52 . 22 . 15 + 11 .25 f) 20190 + 12019 . ( 32 . 3 – 24 : 8)

g) 22 . 31 – ( 12020 + 20200) : | -2| h) { 47 – [ 736 : ( 5 – 3)4]} . 2020

**Bài 2:** Tìm x biết:

a) 5 – ( 10 – x) = 7 b) 2( 4x + 1) – 1 = 17 c) 30 – 3( x – 2) =18

d) 119 + 33. x = 23 . ( -5)2  e) x – ( 13 – x) = - 24 + ( - 7 + x) f) 5( x – 6) – 2( x + 3) =12

g) 3( x – 4) – ( 8 – x) = 12 h) 7( x – 3) – 5( 3 – x) = 11x – 5 i) | x + 1| - 16 = - 3

j) 12 – 4. | x – 9| = -4 k) ( x + 3).( x – 4) = 0 l) (x – 5)2. ( 8 + x3) = 0

m) ( x 2 – 25) . ( 6 – 2x) = 0

**Bài 3:** Tìm x, y biết:

a) ( x – 5)(y – 7) =1 b) (x + 4)(y – 2) = 2 c) (x+ 3)(2y – 6) = - 4

d) ( x + 7)(5 – y) = - 6 e) ( 12 – x)( 6 – y) = -2

**Bài 4:** Tìm GTNN hoặc GTLN của các biểu thức sau:

a) A = | x + 2| + 50 b) B = 2020 - | x + 8| c) C = 1000 + 2.| x – 6|

d) D = | 2x + 8| + 100 e) E = -200 - | 9 – 3x|

**Bài 5:** Tìm các số nguyên x biết:

a) ( x + 5) x b) ( x + 7) ( x – 3) c) ( x + 13) ( x +4) d) ( 2x + 6) ( x + 1)

e) ( 3x – 12) ( x – 5) f\*) ( 3x + 5) ( 2x -1)

**ĐÁP ÁN PHIẾU ÔN TẬP TOÁN SỐ 2**

**Bài 1:** **Thực hiện phép tính:**

|  |  |  |
| --- | --- | --- |
| a) ( -125) . 25 . ( -32) . ( -4)  = ( - 125) . ( -32) . [ 25 . ( -4)]  = 4000 . ( - 100)  = - 400 000 | b) ( -2) 5 . ( -25) . 5 . ( - 4)  = ( - 32) . ( - 25) . [ 5 . ( - 4) ]  = 800 . (- 20)  = - 16000 | c) [164 – ( 12 . 5 + 4)] : 4 + 46  = [ 164 – ( 60 + 4) ] : 4 + 46  = ( 164 – 64) : 4 + 46  = 100 : 4 + 46  = 25 + 46  = 71 |
| d) 7 + 15 : [55 – 2( 3 . 12 -11)]  = 7 + 15 : [ 55 – 2( 36 – 11)]  = 7 + 15 : ( 55 – 2 . 25)  = 7 + 15 : ( 55 – 50)  = 7 + 15 : 5  = 7 + 3  = 10 | e) 25 . 29 + 52 . 22 . 15 + 11 .25  = 25 . 29 + 25 . 4 . 15 + 11 . 25  = 25 . 29 + 25 . 60 + 11 . 25  = 25 . ( 29 + 60 + 11)  = 25 . 100  =2500 | f) 20190 + 12019 . ( 32 . 3 – 24 : 8)  = 1 + 1 .( 27 – 16 : 8)  = 1 + ( 27 – 2)  = 26 |
| g) 22 . 31 – ( 12020 + 20200) : | -2|  = 4 . 3 – ( 1 + 1) : 2  = 12 – 2 : 2  = 12 – 1  = 11 | h) { 47 – [ 736 : ( 5 – 3)4]} . 2020  = [ 47 – ( 736 : 24)] . 2020  = [ 47 – ( 736 : 16)] . 2020  = ( 47 – 46) . 2020  = 1 . 2020  = 2020 |  |

**Bài 2:** **Tìm x biết:**

|  |  |  |
| --- | --- | --- |
| a) 5 – ( 10 – x) = 7  ( 10 – x) = 5 – 7  10 – x = - 2  x = 10 – ( -2)  x = 12 | b) 2( 4x + 1) – 1 = 17  2( 4x + 1) = 17 + 1  2( 4x + 1) = 18  4x + 1 = 18 : 2  4x + 1 = 9  4x = 9 – 1  4x = 8  x = 8 : 2  x = 4 | c) 30 – 3( x – 2) =18  3( x – 2) = 30 – 18  3( x – 2) = 12  x – 2 = 12 : 3  x – 2 = 4  x = 4 + 2  x = 6 |
| d) 119 + 33. x = 23 . ( -5)2  119 + 27x = 8 . 25  119 + 27x = 200  27x = 200 – 119  27x = 81  x = 81 : 27  x = 3 | e) x – ( 13 – x) = - 24 + ( - 7 + x)  x – 13 + x = - 24 – 7 + x  2x – 13 = - 31 + x  2x – x = - 31 + 13  x = - 18 | f) 5( x – 6) – 2( x + 3) =12  5x – 30 – 2x – 6 = 12  3x – 36 = 12  3x = 12 + 36  3x = 48  x = 48 : 3  x = 16 |
| g) 3( x – 4) – ( 8 – x) = 12  3x – 12 - 8 + x = 12  4x - 20 = 12  4x = 12 + 20  4x = 32  x = 32 : 4  x = 8 | h) 7( x – 3) – 5( 3 – x) = 11x – 5  7x – 21 - 15 + 5x = 11x - 5  12x – 36 = 11x – 5  12x – 11x = -5 + 36  x = 31 | i) | x + 1| - 16 = - 3  | x – 1| = - 3 + 16  | x – 1| = 13   |  |  | | --- | --- | | TH1: x – 1 = 13  x = 13 + 1  x = 14 | TH2:x – 1 = -13  x = -13 + 1  x = - 12 |   Vậy x { 14 ; - 12} |
| j) 12 – 4. | x – 9| = - 4  4 . | x – 9| = 12 – ( - 4)  4 . | x – 9| = 16  | x – 9| = 16 : 4  | x – 9| = 4   |  |  | | --- | --- | | TH1: x – 9 = 4  x = 4 + 9  x = 13 | TH2: x – 9 = -4  x = - 4 + 9  x = 5 |   Vậy x { 13 ; 5} | k) ( x + 3).( x – 4) = 0   |  |  | | --- | --- | | TH1: x + 3 = 0  x = - 3 | TH2:x – 4 = 0  x = 4 |   Vậy x { - 3 ; 4} | l) (x – 5)2. ( 8 + x3) = 0   |  |  | | --- | --- | | TH1:(x – 5)2= 0  x – 5 = 0  x = 5 | TH2: 8 + x3= 0  x3 = - 8  x3 = ( -2)3  x = -2 |   Vậy x { - 2 ; 5} |
| m) ( x 2 – 25) . ( 6 – 2x) = 0   |  |  | | --- | --- | | TH1:x 2 – 25= 0  x2 = 25  x = 5 | TH2: 6 – 2x = 0  2x = 6  x = 6 : 2  x = 3 | |  |  |

Vậy x { 5 ; 3}

**Bài 3:** **Tìm x, y biết:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a) ( x – 5)(y – 7) =1  (x – 5) và( y – 7 ) Ư(1)={1; -1}   |  |  |  | | --- | --- | --- | | x – 5 | 1 | -1 | | y – 7 | 1 | -1 | | x | 6 | 4 | | y | 8 | 6 |   Vậy ; | b) (x + 4)(y – 2) = 2  (x +4)và( y – 2)Ư(2)={1; 2}   |  |  |  |  |  | | --- | --- | --- | --- | --- | | x +4 | 1 | -1 | 2 | -2 | | y – 2 | 2 | -2 | 1 | -1 | | x | -3 | -5 | -2 | -6 | | y | 4 | 0 | 3 | 1 |   Vậy ; ;  ; | c) (x+ 3)(2y – 6) = - 4  (x +3)và(2y –6)Ư(4)={1; 2; 4}   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | x +3 | 1 | -1 | 2 | -2 | 4 | -4 | | 2y - 6 | -4 | 4 | -2 | 2 | -1 | 1 | | x | -2 | -4 | -1 | -5 | 1 | -7 | | 2y | 2 | 10 | 4 | 8 | 5 | 7 | | y | 1 | 5 | 2 | 4 | X | X |   Vậy ; ;  ; |

**Bài 4:** **Tìm GTNN hoặc GTLN của các biểu thức sau:**

|  |  |  |
| --- | --- | --- |
| a) A = | x + 2| + 50  Vì: | x + 2| 0 x  | x + 2| + 50 50 x  A 50 x  Vậy A nhỏ nhất bằng 50  Dấu bằng xảy ra  | x + 2| = 0  x + 2 = 0  x = - 2 | b) B = 2020 - | x + 8|  Vì: | x + 8| 0 x  - | x + 8| 0 x  2020 - | x + 8| 2020 x  B 2020 x  Vậy B lớn nhất bằng 2020  Dấu bằng xảy ra  | x + 8| = 0  x + 8 = 0  x = - 8 | c) C = 1000 + 2.| x – 6|  Vì: | x - 6| 0 x  2.| x - 6| 0 x  1000 + 2.| x – 6| 1000 x  C 1000 x  Vậy C nhỏ nhất bằng 1000  Dấu bằng xảy ra  | x – 6 | = 0  x - 6 = 0  x = 6 |
| d) D = | 2x + 8| + 100  Vì: | 2x + 8| 0 x  | 2x + 8| + 100 100 x  D 100 x  Vậy D nhỏ nhất bằng 100  Dấu bằng xảy ra  | 2x + 8| = 0  2x + 8= 0  2x = - 8  x = - 4 | e) E = -200 - | 9 – 3x|  Vì: | 9 – 3x | 0 x  - | 9 – 3x | 0 x  - 200 - | x + 8| - 200 x  E - 200 x  Vậy E lớn nhất bằng -200  Dấu bằng xảy ra  | 9 – 3x | = 0  9 – 3x = 0  3x = 9  x = 3 |  |

**Bài 5:** Tìm các số nguyên x biết:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a) ( x + 5) x  Vì: x x  Để ( x + 5) x  5 x  x Ư( 5) = { 1 ; 5}  Vậy x { 1 ; 5} | b) ( x + 7) ( x – 3)  Vì: ( x – 3) ( x – 3)  Để ( x + 7) ( x – 3)  ( x + 7) - ( x – 3) ( x – 3)  10 ( x – 3)  x-3Ư(10)= {1;2;5 ;10}   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | x - 3 | 1 | -1 | 2 | -2 | 5 | -5 | 10 | -10 | | x | 4 | 2 | 5 | 1 | 8 | -2 | 13 | -7 |   Vậy x { } | d) ( 2x + 6) ( x + 1)  Vì: ( x + 1) ( x + 1)  2( x + 1) ( x + 1)  2x + 2 ( x + 1)  Để ( 2x + 6) ( x + 1)  ( 2x + 6) - ( 2x +2) ( x + 1)  4 ( x + 1)  x+1Ư(4)= {1;2;4}   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | x + 1 | 1 | -1 | 2 | -2 | 4 | -4 | | x | 0 | -2 | 1 | -3 | 3 | -5 |   Vậy x { } |