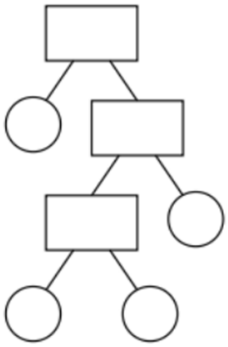
#1: What are the prime factors for 72?



a) 1, 2, 3, 7
b) 2, 2, 3, 3
c) 2, 2, 3, 3, 3
d) 3, 2, 3, 2, 3
e) 2, 2, 2, 3, 3

#2: Simplify:

$-10 - -7$

$5 -- -8$

a) 17, 13
b) -17, -13
c) -3
d) 3, -3
e) 10, 5

#3: Simplify:

$$-1 - -2 + \frac{-4(-3)^2}{(2 - (-2^2)}$$

a) -5
b) -3
c) 1
d) 3
e) 5

#4: Simplify:

$-1(-3)(-2)(5-3)$

a) 12
b) -12
c) 6
d) -6
e) 0

#5: Simplify:

$5(2\,x - 3)$

a) 10x-15
b) 10x+15
c) -5
d) 5x-5
e) -10x-15

#6: Write a math expression:

Twice the difference of a number and twelve is =?

a) 2x-12
b) x-12
c) 2-12
d) 2(x-12)
e) x+12-2

#7: Evaluate for x = 3, y = -2

$-2(x - 3y)$

a) 12
b) 6
c) -2
d) -12
e) -18

#8: Simplify

$5x^2 - 2 - x + 3x^2 + 4x$

a) 8x-3
b) $8x^2+3x-2$
c) 3x-4
d) $5x^2+3x-2$
e) $-3x^2+5x+2$

#9: Simplify

$2y^3(4x)3x^2xy^2$

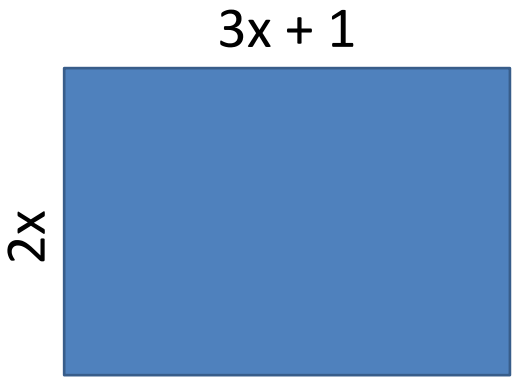
a) $24x^4y^5$
b) $12x^4y^5$
c) $24x^5y^4$
d) $14x^3y^2$
e) $24x^4y^4$

#10: Simplify

7^5 = ?

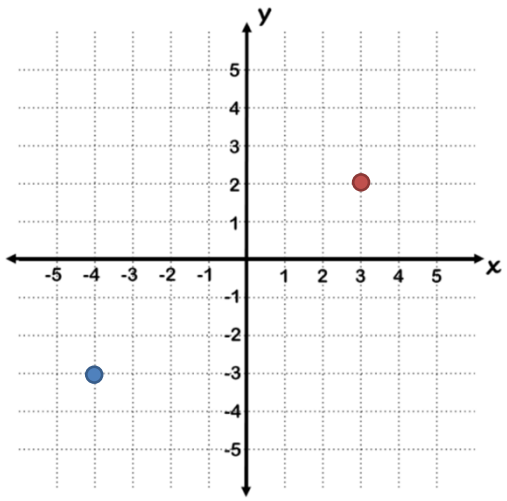
a) 75
b) 2,401
c) 16,807
d) 35,240
e) 18,607

#11: What is the area?

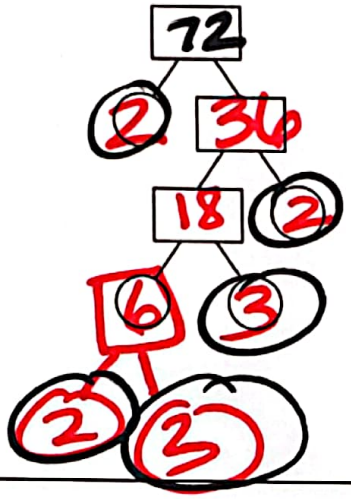


a) $6x^2+x$
b) $6x^2+2x$
c) $5x^2+x+1$
d) $5x^2+2x$
e) $6x^2+x+2$

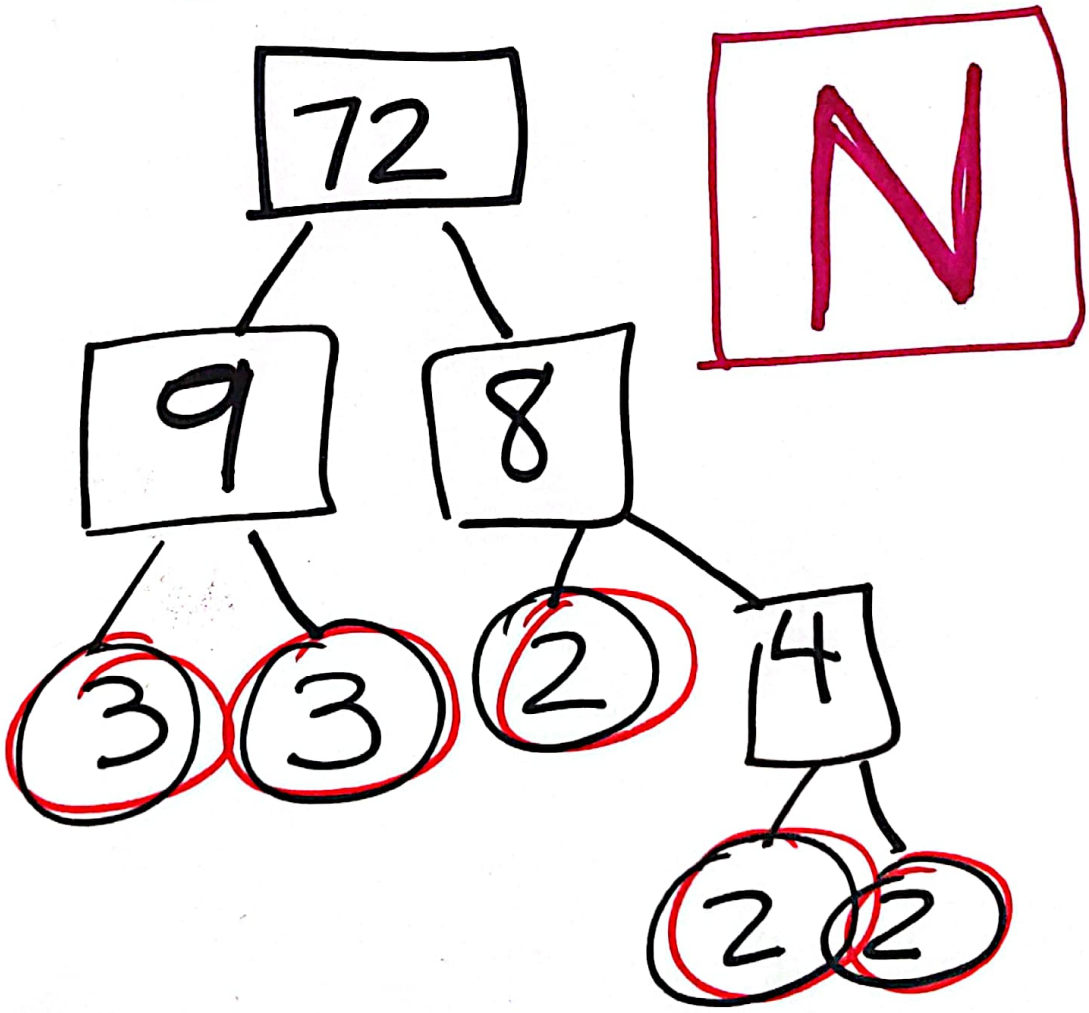
#12:
What are the coordinates of the two points?



#1: What are the prime factors for 72?



a) 1, 2, 3, 7
b) 2, 2, 3, 3
c) 2, 2, 3, 3, 3
d) 3, 2, 3, 2, 3
e) 2, 2, 2, 3, 3



#2: Simplify:

$-10 - -7$

$-10 + 7 = -3$

$5 -- -8$

$5 + -8 = 5 - 8$

$= -3$

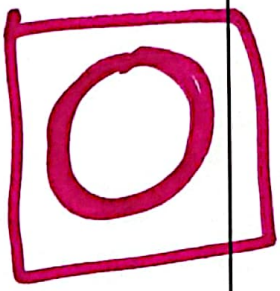
~~a) 17, 13~~

~~b) -17, -13~~

c) -3

d) 3, -3

~~e) 10, 5~~



#3: Simplify:

$$-1 - -2 + \frac{-4(-3)^2}{(2-(-2^2))}$$

a) -5
b) -3
c) 1
d) 3
e) 5

$-1+2+[\ ]$

$+1+\dfrac{-4(-3)(-3)}{2-(-2\cdot 2)}$

F

$+1+\dfrac{-4(9)}{2-(-4)}$

$+1+\dfrac{-36}{+6} = 1-6 = \underline{\underline{-5}}$

#4: Simplify:

$-1(-3)(-2)(5-3)$

a) 12
b) -12
c) 6
d) -6
e) 0

PEMDAS
( )
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+ -

$-1 \cdot -3 \cdot -2 \cdot +2 = -12$

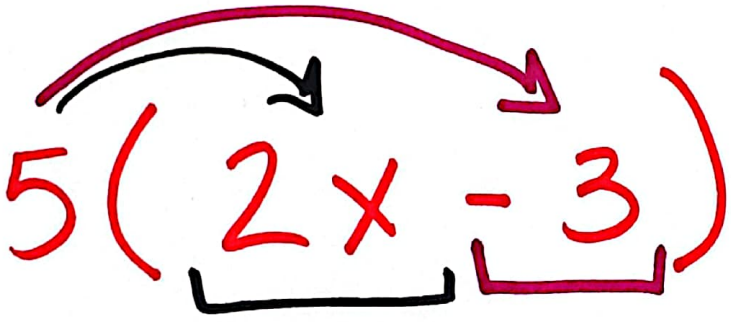
3 × 4

B

#5: Simplify:

$5(2x-3)$

a) 10x-15
b) 10x+15
c) -5
d) 5x-5
e) -10x-15



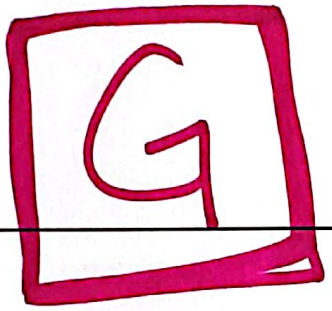
I

$= 10x - 15$

#6: Write a math expression:

Twice the difference of a number and twelve is =?

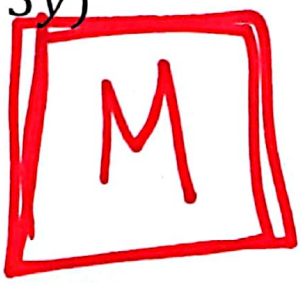
a) 2x-12
b) x-12
c) 2-12
d) 2(x-12)
e) x+12-2



$2(x-12)$

#7: Evaluate for x = 3, y = -2

$-2(x - 3y)$



a) 12
b) 6
c) -2
d) -12
e) -18

$-2(3 - 3(-2))$

$-2(3 + 6)$

$-2(9) = -18$

PEMDAS

#8: Simplify

$5x^2 - 2 - x + 3x^2 + 4x$

a) 8x-3
b) $8x^2+3x-2$
c) 3x-4
d) $5x^2+3x-2$
e) $-3x^2+5x+2$

$5x^2 + 3x^2 = 8x^2$

$-x + 4x = 3x$

$-2 = -2$

C

$= 8x^2 + 3x - 2$

#9: Simplify

$2y^3(4x)3x^2xy^2$

a) $24x^4y^5$
b) $12x^4y^5$
c) $24x^5y^4$
d) $14x^3y^2$
e) $24x^4y^4$

$2 \cdot 4 \cdot 3 = 24$

$24\,x^1 \cdot x^2 \cdot x^1 \cdot y^3 \cdot y^2$ (x·x; y·y·y; y·y)

$24\,x^4 \cdot y^5$

A

#10: Simplify

$7^5 = ?$

$= 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$

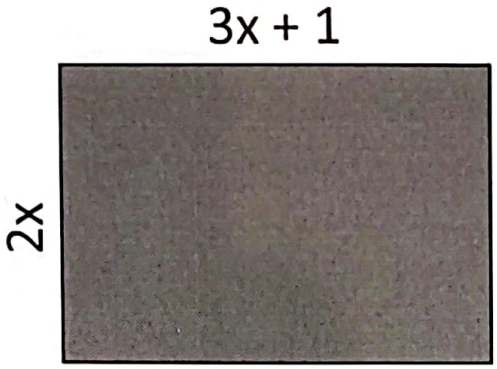
a) 75
b) 2,401
c) 16,807
d) 35,240
e) 18,607

$= 16,807$

E

#11: What is the area?

$A = l \cdot w$



a) $6x^2+x$
b) $6x^2+2x$
c) $5x^2+x+1$
d) $5x^2+2x$
e) $6x^2+x+2$

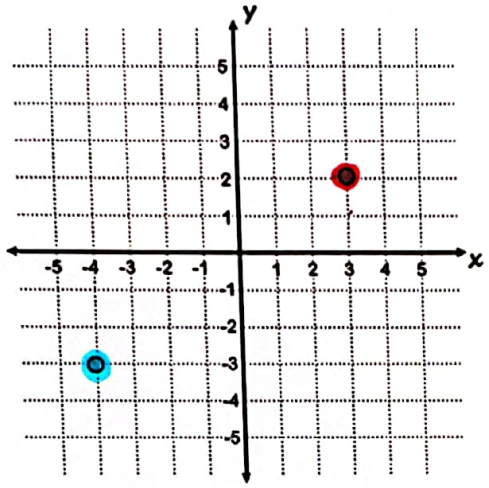
$A = (3x+1)(2x)$

$A = 6x^2 + 2x$

F

#[redacted]: 12

What are the coordinates of the two points?



Red (3, 2)

Blue (-4, -3)

E