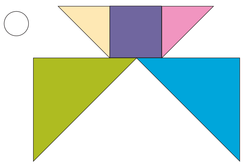
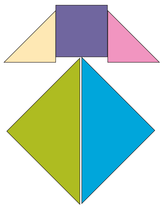
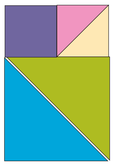
Algorithms Tangrams

Which one of these drawings does not follow the algorithm provided?

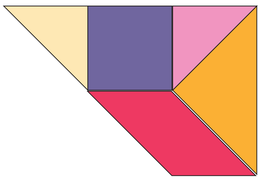
1) Put two large triangles at the bottom of the image.
2) Put a square on top of those two triangles.
3) Put two litte triangles beside the square.







Which algorithm goes with the drawing?



1) Use three triangles, a square, and another piece
2) Line two triangles up with the square
3) Put a third triangle to the right of those shapes
4) Put the last piece at the bottom

1) Use three triangles, a rhombus, and another piece
2) Put the rhombus at the bottom
3) Put all three triangles above the rhombus
4) Put the final piece to the left of everything else

1) Use two triangles, a square, and another piece
2) Line two triangles up with the square
3) Put the last piece on top of the square

Envelope Variables

Match the sentence to the value of the variable that goes with it.

var1 = awesome,
var2 = gravy,
var3 = pretty,
Var1 = fake,
Var2 = tough

1. My friends are _____ . (var1)
2. Mowing the lawn is _____ . (Var2)
2. My dog likes _____ . (var2)
3. Nightmares are _____ . (Var1)
4. The stars look _____ . (var3)

- awesome
- gravy
- pretty
- fake
- tough

For Loop Fun

Which of these loops will count the even numbers between 2 and 10?

1) For values of **X** from 1 to 10 incrementing by 4
2) For values of **X** from 2 to 11 incrementing by 3
3) For values of **X** from 2 to 11 incrementing by 2
4) For values of **X** from 2 to 15 incrementing by 2

Which of the sets of numbers below will be counted by this for loop?

For values of **X** from 5 to 40 incrementing by 4

1) 4, 8, 12, 16, 20, 24, 28, 32, 36, 40
2) 5, 9, 13, 17, 21, 25, 29, 33, 37
3) 8, 12, 16, 20, 24, 28, 32, 36, 40

Mad Glib Abstraction

Which of these sentences does not fit the abstracted template below?

Abstracted Template:
The cow said _____, and I _____.

A) The cow said "Moo", and I smiled.
B) The cow said "Hello", and I screamed.
C) The cow hollered "Moo", then I yawned.
D) The cow said something animal-like, and I yawned.

Which of the abstracted templates below would work for all of these sentences?

Sentences:
I am so smart. Everyone thinks so!
My friends are so smart. Even the teacher thinks so!
Puppies are so smart. Mine thinks like a human!
Recycling is so smart. Mom thinks it can save the planet!

A) _____ so smart. _____ thinks _____!
B) _____ are so smart. _____ thinks so!
C) _____ friends ____ so smart. _____ thinks so!
D) _____. _____ thinks !

Songwriting with Parameters

Match the function call with the chorus

Chorus (NumberOfMonkeys):
NumberOfMonkeys little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor and the doctor said
"No more monkeys jumping on the bed!"

chorus(Two)

Five little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor and the doctor said
"No more monkeys jumping on the bed!"

chorus(Five)

Three little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor and the doctor said
"No more monkeys jumping on the bed!"

chorus(Three)

Two little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor and the doctor said
"No more monkeys jumping on the bed!"

Identify the chorus of this song

Big Rock Candy Mountains:
In the Big Rock Candy Mountains
There's a land that's fair and bright
Where the handouts grow on bushes
And you sleep out every night
Where the boxcars are all empty
And the sun shines every day
Oh, I'm bound to go where there ain't no snow
Where the rain don't fall and the wind don't blow
In the Big Rock Candy Mountains

Oh the buzzin of the bees in the peppermint trees
Around the soda water fountains
Where the lemonade springs and the bluebird sings
In the Big Rock Candy Mountains

In the Big Rock Candy Mountains
You never change your socks
And little streams of lemonade
Come a tricklin down the rocks
The hobos there are friendly
And their fires all burn bright
There's a lake of stew and soda, too
You can paddle all around 'em in a big canoe
In the Big Rock Candy Mountains.

Oh the buzzin of the bees in the peppermint trees
Around the soda water fountains
Where the lemonade springs and the bluebird sings
In the Big Rock Candy Mountains

- And you sleep out every night
  Where the boxcars are all empty
  And the sun shines every day
  Oh, I'm bound to go where there ain't no sno
  Where the rain don't fall and the wind don't
  In the Big Rock Candy Mountains
- Oh the buzzin of the bees in the peppermint
  Around the soda water fountains
  Where the lemonade springs and the bluebi
  In the Big Rock Candy Mountains
- In the Big Rock Candy Mountains
  You never change your socks
  And little streams of lemonade
  Come a tricklin down the rocks

Binary Images

Match the image to its binary encoding

image #1

image #2

image #3

A) ★✕✕✕★★✕✕✕★✕✕✕✕✕★✕✕✕★★✕✕✕★

B) ○●●●○●○○○●●○○○●●○○○●○●●●○

C) ↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑↑