

$$a, (16 \times 16) \cdot (3+1) = 16 \cdot 16 \cdot 4 = 1024$$

Store 2 instance of it. So, first one is a cold miss but the

instance but we need just one of them so, 1 miss, 1 hit out of

every 2 iteration. for second one 1 miss, 5 hits for every 2

iteration, therefore $\left[(16 \cdot 16) \cdot \frac{1}{2} + (16 \cdot 16 \cdot 3) \cdot \frac{1}{6} \right] = 256$ mins in total

first loop

C	m	y	K	C	m	y	K
		Miss				Hit	

Second loop

C	m	y	K	C	m	y	K
Miss	Hit		Hit		Hit	Hit	Hit

$$C, \quad \frac{256}{1024} \cdot 100 = 25\%$$

total number of writes $\rightarrow 640 \cdot 480 \cdot 4 = 1,228,800$ **don't need it but anyway***

number of misses \rightarrow with 4-B cache and the size of 4-B for an instance. we have

we go by {column}{row}

	0	1	2	3
0	19109			
1	Second iteration			
2	third iteration			
3				

So no matter we go $[\text{column}][\text{row}]$ or $[\text{row}][\text{column}]$, we still have first cold miss

r	g	b	a
---	---	---	---

miss └──────────┘ hit

and the rest hit, So miss rate is $\frac{1}{4}$

The percentage that cache will miss is 25%