

Wednesday, March 16

Name \_\_\_\_\_

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6.035 Spring 2016

Miniquiz #16

5 minutes

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For the basic block:

```
q = 3
r = 10
s = q + r
t = 2*r+s
t = q
u = q + r
v = q + t
w = 3 + x
```

State which optimization was performed on the above block to produce the following blocks. The optimization choices are: Copy Propagation, Common Subexpression Elimination, and Dead Code Elimination.

1. 

```
q = 3
r = 10
s = q + r
t1 = s
t = 2*r+s
t = q
u = t1
v = q + t
w = 3 + x
```

2. 

```
q = 3
r = 10
s = q + r
t = 2*r+s
t = q
u = q + r
v = q + q
w = 3 + x
```

3. 

```
q = 3
r = 10
s = q + r
t = q
u = q + r
v = q + t
w = 3 + x
```