## EECS 10: Computational Methods in Electrical and Computer Engineering Quiz on Lectures 1-8

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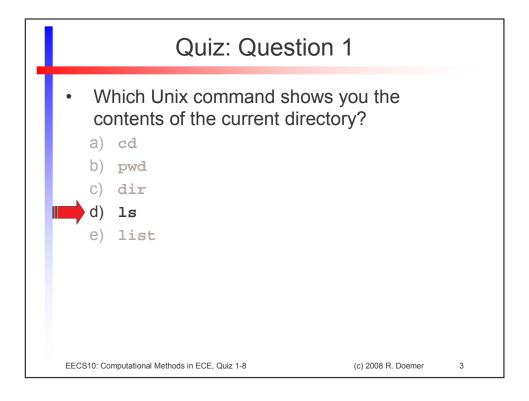
## Quiz: Question 1

- Which Unix command shows you the contents of the current directory?
  - a) cd
  - b) pwd
  - c) dir
  - d) ls
  - e) list

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- Which of the following Unix commands renames file "text1" into "homework1"?
  - a) ren text1 homework1
  - b) ren homework1 text1
  - c) mv text1 homework1
  - d) rm text1 homework1
  - e) mv homework1 text1

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- Which of the following Unix commands renames file "text1" into "homework1"?
  - a) ren text1 homework1
  - b) ren homework1 text1
  - C) mv text1 homework1
  - d) rm text1 homework1
  - e) mv homework1 text1

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## Quiz: Question 3

- What is C not?
  - a) a structured programming language
  - b) a object-oriented programming language
  - c) a compiled programming language
  - d) a high-level programming language
  - e) a portable programming language

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## Quiz: Question 3 What is C not? a) a structured programming language b) a object-oriented programming language c) a compiled programming language d) a high-level programming language e) a portable programming language

## Quiz: Question 4

 What is the meaning of the following code fragment?

/\* printf("C programming is great!\n") \*/

- a) it prints "C programming is boring!"
- b) it prints "C programming is great!"
- c) it is a syntax error because a semicolon is missing after the printf() statement
- d) it is the main function of the C program
- e) it is a comment ignored by the compiler

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## Quiz: Question 4 What is the meaning of the following code fragment? /\* printf("C programming is great!\n") \*/ a) it prints "C programming is boring!" b) it prints "C programming is great!" c) it is a syntax error because a semicolon is missing after the printf() statement d) it is the main function of the C program e) it is a comment ignored by the compiler

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## Quiz: Question 5

 What is true about of the following compiler call? (Check all that apply!)

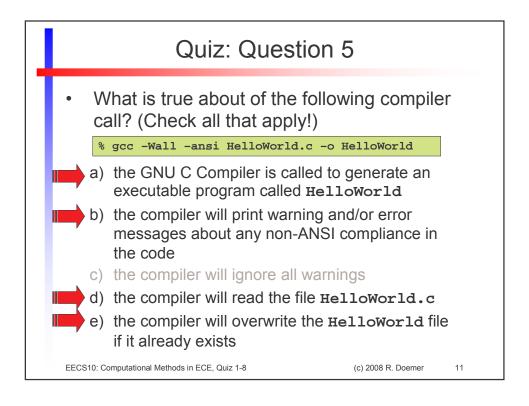
% gcc -Wall -ansi HelloWorld.c -o HelloWorld

- a) the GNU C Compiler is called to generate an executable program called Helloworld
- the compiler will print warning and/or error messages about any non-ANSI compliance in the code
- c) the compiler will ignore all warnings
- d) the compiler will read the file Helloworld.c
- e) the compiler will overwrite the Helloworld file if it already exists

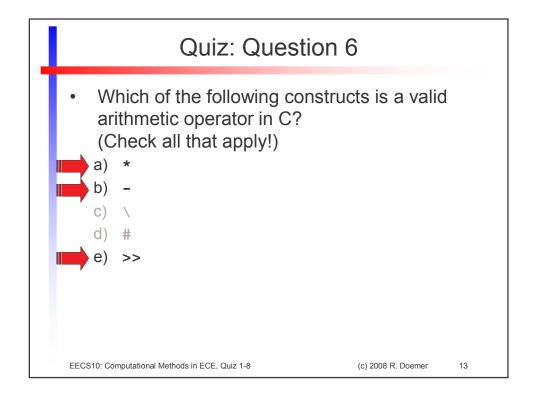
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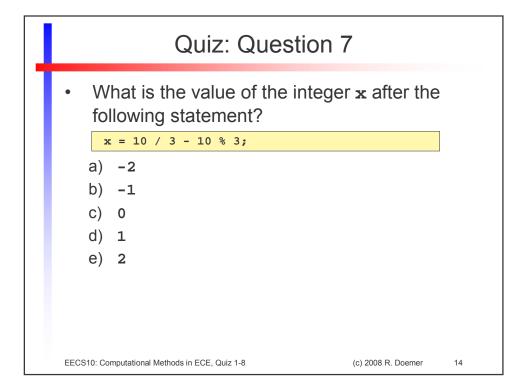
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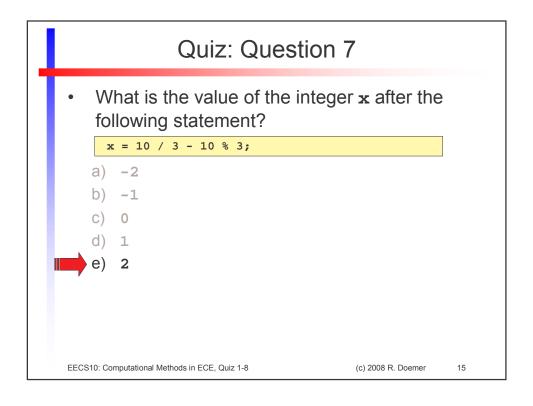
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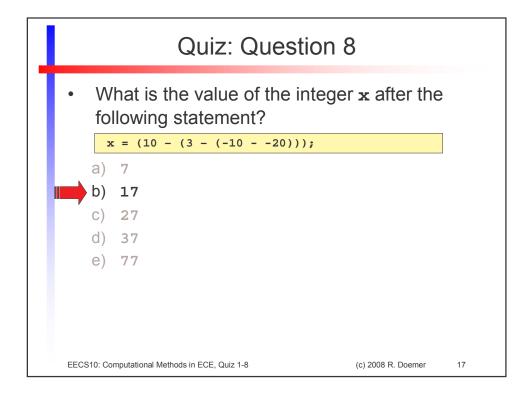
# Quiz: Question 6 Which of the following constructs is a valid arithmetic operator in C? (Check all that apply!) a) \* b) c) \ d) # e) >> EECS10: Computational Methods in ECE, Quiz 1-8 (c) 2008 R. Doemer 12







# Quiz: Question 8 What is the value of the integer x after the following statement? x = (10 - (3 - (-10 - -20))); a) 7 b) 17 c) 27 d) 37 e) 77 EECS10: Computational Methods in ECE, Quiz 1-8 (c) 2008 R. Doemer 16



## Which of the following format strings will print an unsigned int value in decimal format when used with printf()? a) "%ud" b) "%d" c) "%lu" d) "%ui" e) "%u"

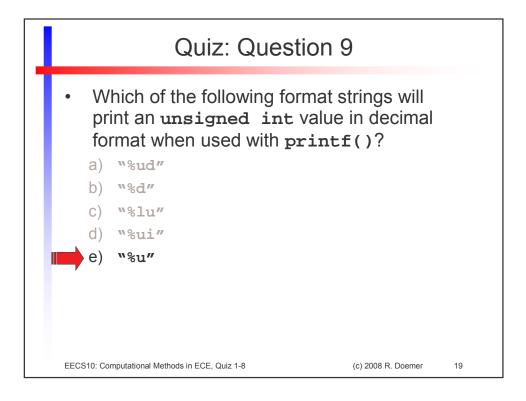
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Quiz: Question 9

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- Which of the following statements will correctly read a decimal value from stdin into a variable x of type signed int?
  - a) stdin("%x", &u);
  - b) scanf("%d", &x);
  - C) stdin("%u", x);
  - d) scanf("&x", %u);
  - e) scanf("&x", %d);

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## Quiz: Question 10 Which of the following statements will correctly read a decimal value from stdin into a variable x of type signed int? a) stdin("%x", &u); b) scanf("%d", &x); c) stdin("%u", x); d) scanf("&x", %u); e) scanf("&x", %d);

## Quiz: Question 11

• What is the value of the integer x after the following statement?

```
x = 1 << 2 >> 1;
```

a) Syntax Error!

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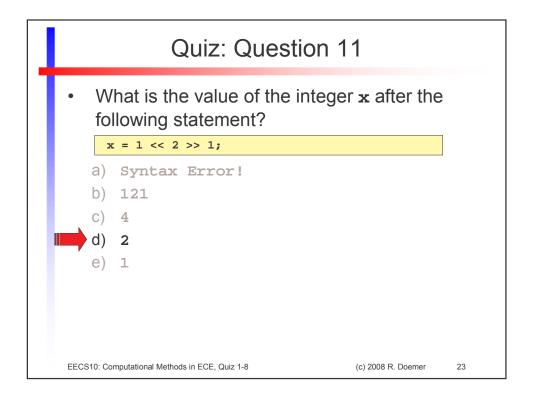
- b) 121
- c) 4
- d) 2
- e) 1

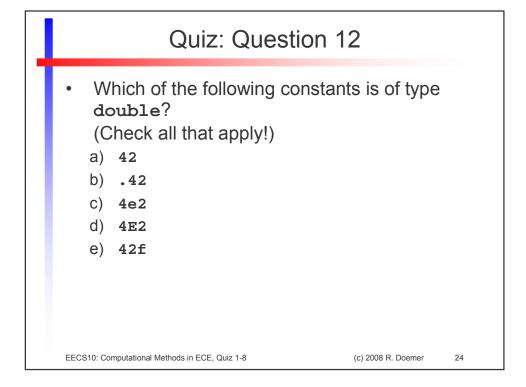
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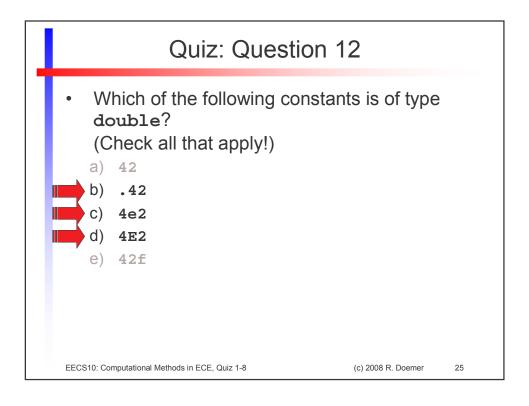
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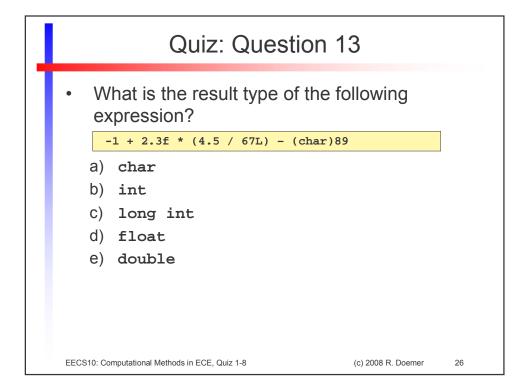
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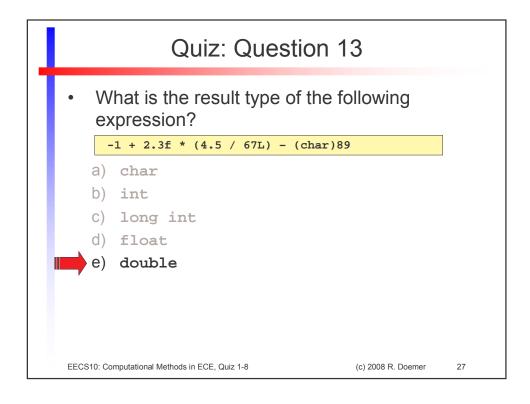
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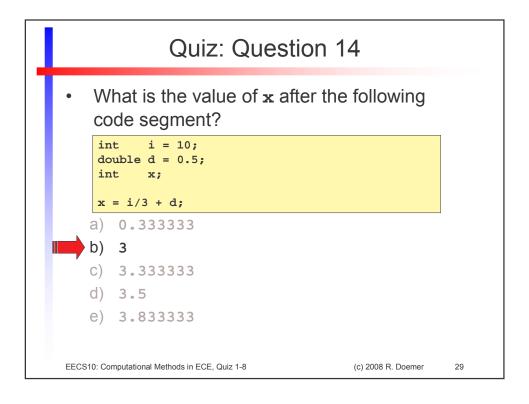








## Quiz: Question 14 What is the value of x after the following code segment? int i = 10;double d = 0.5; int x; x = i/3 + d;a) 0.333333 3 c) 3.333333 d) 3.5 e) 3.833333 EECS10: Computational Methods in ECE, Quiz 1-8 (c) 2008 R. Doemer 28



```
• Given the following code fragment,

double x;
double y;

x = (int)(y + 0.5);

which of the following statements is true?

(Check all that apply!)

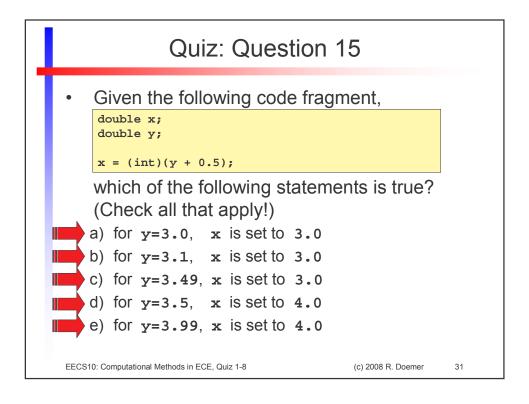
a) for y=3.0, x is set to 3.0

b) for y=3.1, x is set to 3.0

c) for y=3.49, x is set to 3.0

d) for y=3.5, x is set to 4.0

e) for y=3.99, x is set to 4.0
```



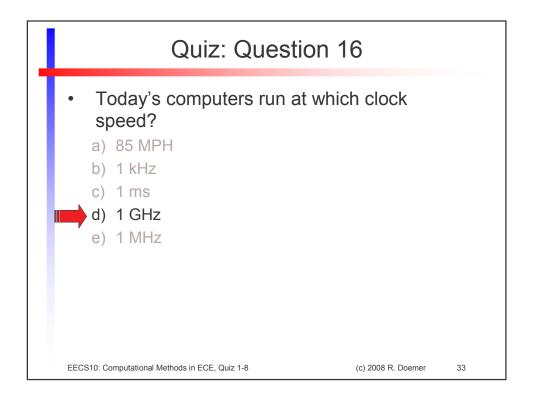
## Today's computers run at which clock speed? a) 85 MPH b) 1 kHz c) 1 ms d) 1 GHz e) 1 MHz

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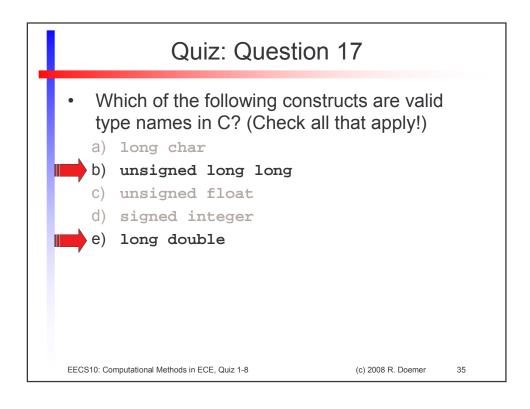


- Which of the following constructs are valid type names in C? (Check all that apply!)
  - a) long char
  - b) unsigned long long
  - c) unsigned float
  - d) signed integer
  - e) long double

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 Assume i is a variable of type int and d is a variable of type double. Which statement is true for the following assignment? (Check all that apply!)

i = (int)d;

- a) The comparison checks whether d is an integer.
- b) The precision of i is doubled.
- c) The parentheses should go around d.
- d) The value in **d** is converted to an integer value and then assigned to **i**.
- e) Any fractional part in d is truncated off.

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 Assume i is a variable of type int and d is a variable of type double. Which statement is true for the following assignment? (Check all that apply!)

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- c) The parentheses should go around d.
- d) The value in d is converted to an integer value and then assigned to i.
- e) Any fractional part in d is truncated off.

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## Quiz: Question 19

- Which of the following expressions correctly computes the polynomial  $p = 2x^2 3x + 4$ ? (Check all that apply!)
  - a)  $p = 2x^2 3x + 4$ ;
  - b) p = 2xx 3x + 4;
  - c) p = x\*2\*x 3\*x + 4.0;
  - d) p = (2\*x 3)\*x + 4;
  - e) p = 2\*(x\*x + 3)\*x + 4;

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- Which of the following expressions correctly computes the polynomial  $p = 2x^2 3x + 4$ ? (Check all that apply!)
  - a)  $p = 2x^2 3x + 4$ ;
  - b) p = 2xx 3x + 4;
  - C) p = x\*2\*x 3\*x + 4.0;
  - d) p = (2\*x 3)\*x + 4;
    - e) p = 2\*(x\*x + 3)\*x + 4;

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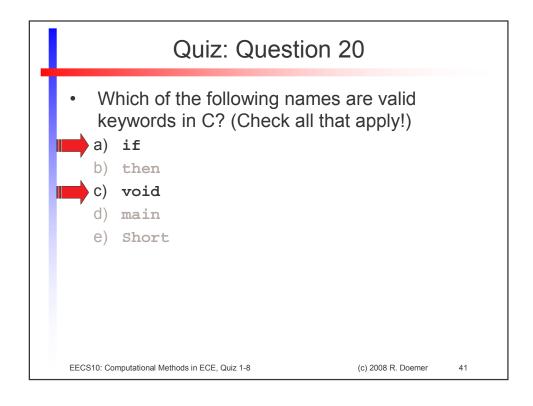
## Quiz: Question 20

- Which of the following names are valid keywords in C? (Check all that apply!)
  - a) if
  - b) then
  - c) void
  - d) main
  - e) Short

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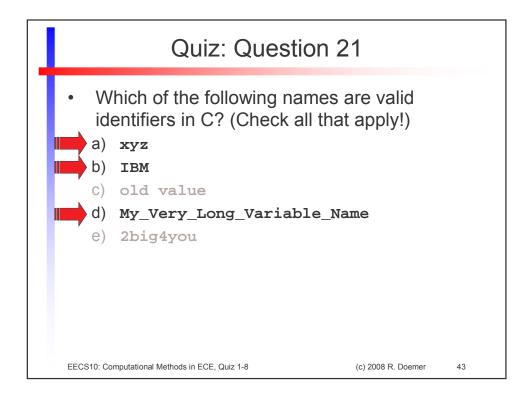


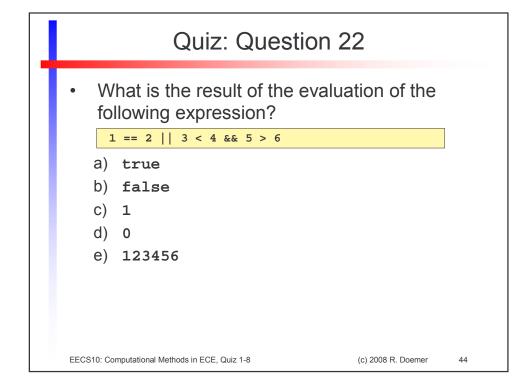
- Which of the following names are valid identifiers in C? (Check all that apply!)
  - a) xyz
  - b) IBM
  - c) old value
  - d) My\_Very\_Long\_Variable\_Name
  - e) 2big4you

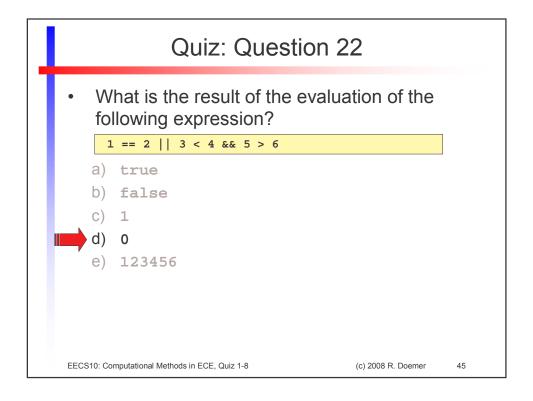
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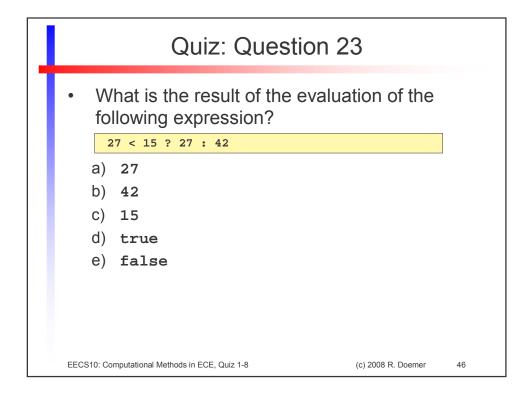
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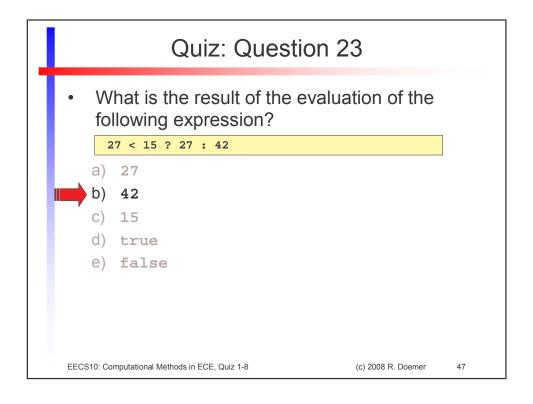
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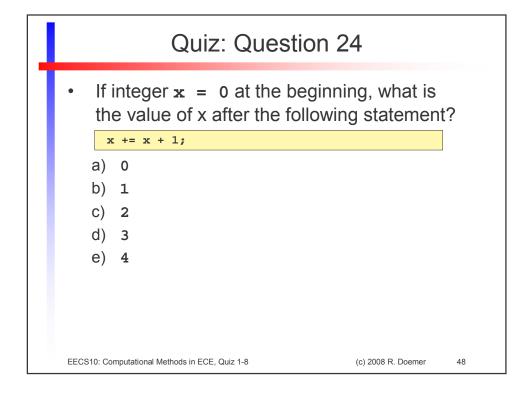


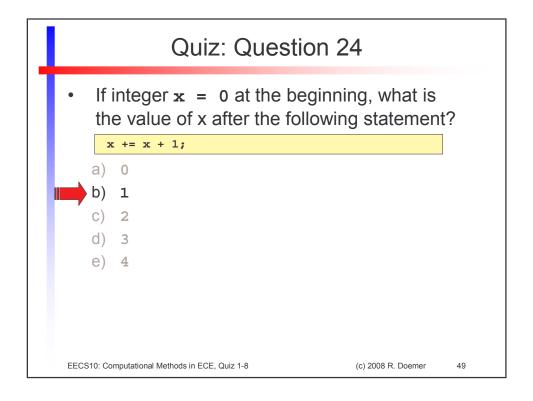


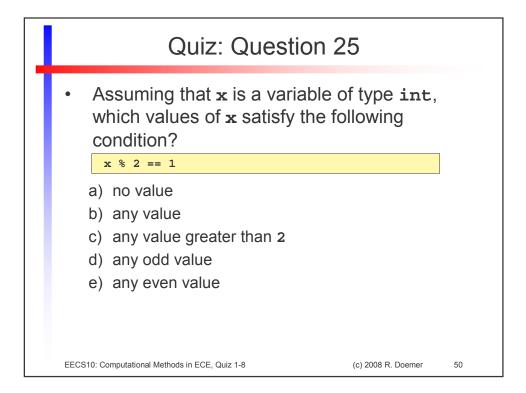


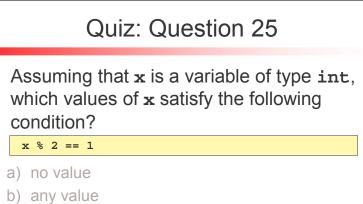












- c) any value greater than 2d) any odd value
- e) any even value

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## Quiz: Question 26

 Assume that x is an integer in the range of 1 through 10 inclusively. Which of the following expressions can be used as a test for x being an even number?

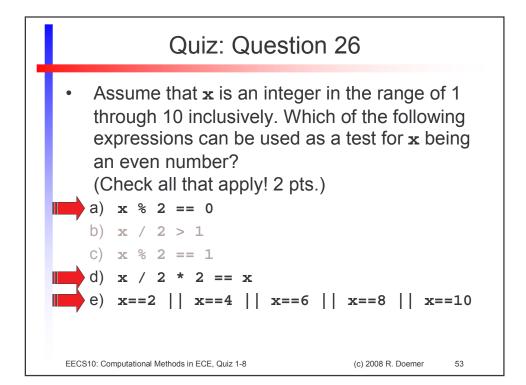
(Check all that apply! 2 pts.)

- a) x % 2 == 0
- b) x / 2 > 1
- c) x % 2 == 1
- d) x / 2 \* 2 == x
- e) x==2 || x==4 || x==6 || x==8 || x==10

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 Given the following program fragment, what is printed when it gets executed?

```
a) nothing
```

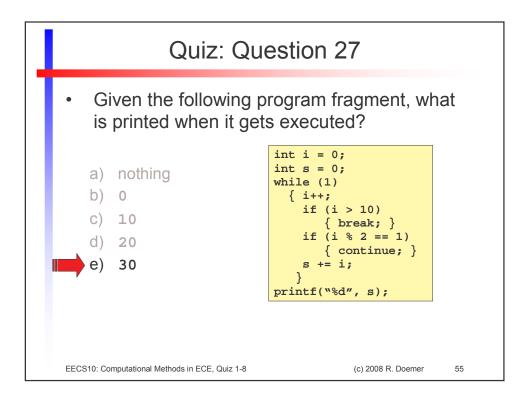
- b) 0
- c) 10
- d) 20
- e) 30

```
int i = 0;
int s = 0;
while (1)
    { i++;
    if (i > 10)
        { break; }
    if (i % 2 == 1)
        { continue; }
    s += i;
    }
printf("%d", s);
```

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 Which of the following variable declarations is valid in ANSI-C?

(Check all that apply! 2 pts.)

- a) double xyz;
- b) double x, y, z;
- c) double x = 1.0;
- d) double x = 1, y = 2, z = 3;
- e) double x,y,z = 1,2,3;

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# Quiz: Question 28 Which of the following variable declarations is valid in ANSI-C? (Check all that apply! 2 pts.) a) double xyz; b) double x, y, z; c) double x = 1.0; d) double x = 1, y = 2, z = 3; e) double x,y,z = 1,2,3;

## Quiz: Question 29

- Which of the following data types has the largest range of representable numbers?
  - a) char
  - b) short int
  - c) long long
  - d) unsigned int
  - e) signed long int

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## Quiz: Question 29 Which of the following data types has the largest range of representable numbers? a) char b) short int c) long long d) unsigned int e) signed long int

## Quiz: Question 30

- Which of the following data types can store the greatest value?
  - a) long int

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- b) float
- c) double
- d) long long int
- e) unsigned long long int

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