

*ID 1050 Practice Exam 1*

**Change this base 4 number to base 10**

1. 30.2
- a) 12.2
  - b) 12.5
  - c) 48.1
  - d) 48.7

**Change these base 2 numbers to base 10**

2. 111
- a) 3
  - b) 7
  - c) 8
  - d) 6
3. 0.101
- a) .22
  - b) .125
  - c) .625
  - d) .01

**Change the base 10 number to base 6.**

4. 46
- a) 64
  - b) 114
  - c) 60
  - d) 55

**Change the base 10 number to base 2.**

5. 24
- a) 10001
  - b) 10101
  - c) 1111
  - d) 11000

**“Fill in” the missing counting number.**

6. ...200, 201, 202, 203, 204, \_\_\_\_\_, 211.
- a) 205
  - b) 201
  - c) 210
  - d) 200

**Do the indicated operations.**

7.  $-10 - (-11) =$
- a) -21
  - b) 21
  - c) -1
  - d) 1
8.  $((-8) \times 2) \div (-4) =$
- a) 3
  - b) -3
  - c) 4
  - d) 48

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9.  $\left(\frac{-8}{3}\right) \div \frac{3}{5} =$

a) 2.85  
 b) 1.6  
 c) -0.4  
 d) -4.4444...

10.  $\frac{3}{8} - \frac{2}{5} =$

a) .025  
 b) .45  
 c) -.025  
 d) -.45

Identify the following numbers as rational or irrational.

11.  $\sqrt[3]{10}$

a) rational  
 b) irrational

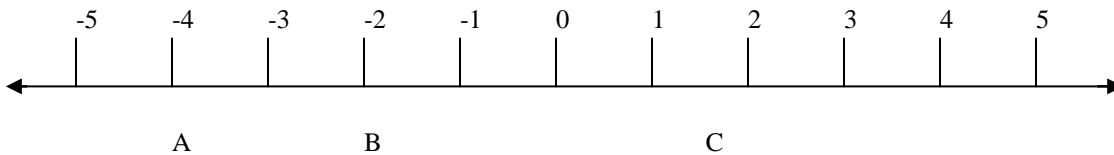
13.  $0.\overline{38}$

a) rational  
 b) irrational

12.  $\frac{2.2}{1.4}$

a) rational  
 b) irrational

Use the number line shown here to answer the following questions.



14. This is the position of the irrational number  $(8)^{1/4}$ :
- a) A  
 b) B  
 c) C  
 d) D
15. This is the position of the smallest number pointed at on the number line:
- a) A  
 b) B  
 c) C  
 d) D

16. This is the position of the rational number  $\frac{-8}{4}$ :
- a) A  
 b) B  
 c) C  
 d) D

Read the abacus.

- 17.
- a) 4.253  
 b) 42.53  
 c) 425.3  
 d) 4253

