Math Common Core Sampler Test

This sample test reviews the top 20 questions we have seen on the 37 assessment directly written for the Common Core Curriculum. This test will be updated as we see new questions come to forefront.

Grade 7 Common Core Math Tests:

http://www.mathworksheetsland.com/tests/grade7.html

For Full Worksheets, Quizzes, and Homework Samples:

http://www.mathworksheetsland.com/7/
1. Compare the numbers mentally on a number line and select the correct statement out of the following statements:

   A. 4 is greater than 6
   B. -3 is greater than -5
   C. 0 is less than -2
   D. -3 is greater than +2

2. Simplify: 
   \[-15(-1.5) + [(-2.5) x 1.25]\]
   A) -19.375    B) 19.375
   C) -25.625    D) 25.625

3. Simplify: \(\sqrt{10} \times \sqrt{15} =\)
   A) \(5\sqrt{6}\)    B) \(6\sqrt{5}\)
   C) 5                D) \(\sqrt{30}\)

4. Select an equivalent expression for: \(12m -6n +2\)
   A) \(6m -3n + 2\)    B) \(12m + 6n - 2\)
   C) \(6m -3n + 1\)    D) \(m -n + 1\)
5. Which inequality shows these numbers in order from least to greatest?

67   42   65   62

A. 42 < 62 < 65 < 67  
B. 62 < 65 < 67 < 42  
C. 62 < 67 < 65 < 42  
D. 42 < 65 < 62 < 67

6. Which of the following is an equivalent fraction to \(-\frac{18}{96}\)?

A) \(-\frac{96}{18}\)  B) \(-\frac{1}{16}\)  C) \(-\frac{3}{16}\)  D) \(\frac{3}{16}\)

7. Your mom gave you a lovely bicycle on your last birthday. The original price of this bicycle was $150. The shopkeeper offered a special discount of 20%. What was amount paid by your mom?

A) $130  B) $135  C) $120  D) $150

8. You buy a television for $550. That price included a 10% sales tax. What is price without sales tax?

A) $500  B) $605  
C) $55  D) $550
9. \(3 \times 0.3 \times 0.03 \times 0.003 \times 30 = ?\)

A) 0.0000243    B) 0.000243
C) 0.00243    D) 0.0243

10. In a test of 4 subjects, Mike gets 96, 60 and 55 in three subjects. If his average (arithmetic mean) mark for all four subjects is 74, then the marks in the 4th subject must be:

A. 74    B. 85    C. 88    D. 82

11. The cost of a toy car is $20 less than 2 times the cost of a toy train. If the cost of toy car is $100, what is the cost of toy train?

A. $40
B. $50
C. $60
D. $80

12. Marvin makes $5 for every hot dog he sells. The hot dog costs him $2 to make. Which expression below would allow you to determine the amount Marvin makes selling 30 hot dogs?

a. \(5 + 2x - 30\)

b. \(5(30) - 2(30)\)

c. \(10 + 30x\)

d. \(7 \times 30\)

(Not these hot dogs!)
13. The radius of a circle is 12 cm. What is the area? (Use approximation.)

A) 425   B) 352
C) 452   D) 442

14. The mean of seven numbers is 12.0. When one new number is added, the average of eight numbers becomes 12.5. What is the new number?

A) 12.0   B) 12.5
C) 16.0   D) 16.5

15. An ordinary single die is thrown. Find the probability that an even number is the outcome.

A) 1/6   B) 1/3
C) 1/2   D) 1/4

16. In how many different ways can the letters of the word “CHINA” be arranged?

A) 25   B) 60
C) 120   D) 180
17. A card is picked up at random from a pack of 52 cards. Find the probability that it is a king or queen.

A) 1/13  B) 2/13  C) 1/2  D) 1/23

18. What shape can you make with this net?

A) Cone  B) Rectangle  
C) Ball  D) Cylinder

19. A table top is made up of circular glass. What is the circumference of the table if it has a radius of 21 cm?

A) 66 cm  B) 126 cm  C) 132 cm  D) 264 cm

20. You have a rectangular box with the dimensions of 4 feet x 2 feet x 1 foot. You have to get it painted red. The painting will cost $2.50 per square foot. How much will it cost you?

A) $70  B) $35  C) $30  D) $20
<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Answer Key for Grade 7 Test Sampler

1. a b c d
2. a b c d
3. a b c d
4. a b c d
5. a b c d
6. a b c d
7. a b c d
8. a b c d
9. a b c d
10. a b c d
11. a b c d
12. a b c d
13. a b c d
14. a b c d
15. a b c d
16. a b c d
17. a b c d
18. a b c d
19. a b c d
20. a b c d
1. B

A number line is a line in which real numbers can be placed, according to their value. It starts with lowest number on the left.

2. B

3. A 5\sqrt{6}

\sqrt{10} \times \sqrt{15} = \sqrt{5x\sqrt{2} \times \sqrt{5x\sqrt{3}}} = 5\sqrt{6}

4. C 6m -3n +1

5. A

6. C -3/16

7. C $120

Discount = 20\% \text{ of } 150 = $30

8. A

9. C

10. B

11. C

12. B

13. C
14. C  16.0

The average of seven numbers is 12.0. Total of 7 numbers = 12.0 \times 7 = 84

Average of 8 number is 12.5. Total of 8 number = 12.5 \times 8 = 100. Hence the eighth number = 100-84 = 16

15. C  1/2

When a dice is thrown, the possible outcomes are 1, 2, 3, 4, 5 and 6. Out of these 6 outcomes, the even numbers are 2, 4 and 6. Thus 3 outcomes are favorable out of 6 outcomes. Probability = \frac{3}{6} = \frac{1}{2}

16. C

17. B  2/13

There are 4 kings and 4 queens in a standard pack of 52 cards. Probability = \frac{8}{52} = \frac{2}{13}

18. D

19. C

20. A