**Bristol Community College**

**Quantitative Reasoning, Algebra, and Statistics**

**Accuplacer Review**

1. Which of the following expressions is 4 times as much as the sum of r and s
2. 4r + s
3. 4 + r + s
4. r + 4s
5. 4( r + s )

[Answer for ACCUPLACER Review Problem 1](https://youtu.be/kOLPx18vP6Q)

1. What is the solution of the equation: 
2. 24
3. 
4. 
5. 7

[Answer for ACCUPLACER Review Problem 2](https://youtu.be/qWu-NP7qYxc)

1. What is the number of grams in 200 kilograms? ( knowing 1kg = 1000 grams )
2. 10
3. 20,000
4. 20
5. 200,000

[Answer for ACCUPLACER Review Problem 3](https://youtu.be/v-6P76O1jjQ)

1. Jen sells four different pies at the farmer’s market. The graph below shows the number of pies she sold during the first two years. Which kind of pie had the greatest increase in sale from year 1 to year 2?
2. Blueberry
3. Grape
4. Peach
5. Strawberry

[Answer for ACCUPLACER Review Problem 4](https://youtu.be/nYDxo3DMc4s)

1. In the x-y plane, a line crosses the y-axis at the point (0, 5 ) and passes through the point (3, 7 ). Which one of the following is the equation of the line?
2. 

1. 
2. 
3. 

[Answer for ACCUPLACER Review Problem 5](https://youtu.be/RszXnm4SpZ8)

1. The amount of money that David earns is represented by the formula: M = 14.5h + 13 where h is the number of hours that he worked. Which one of the following represents the number 13 in the equation?
2. The amount of money David earns each hour
3. The total amount of money David earns in h hours
4. The amount of money David earns working 1 hour
5. The amount of money David earns in addition to an hourly wage

[Answer for ACCUPLACER Review Problem 6](https://youtu.be/ObxsbcsUims)

1. The table below shows the population of the 5 largest countries in the EU in the year 2014. Which of the following is the mean population of these countries?

|  |  |
| --- | --- |
| **Country** | **Population in millions** |
| France | 66 |
| Germany | 81 |
| Italy | 61 |
| Spain | 46 |
| United Kingdom | 64 |

1. 60.8 million
2. 64.3 million
3. 63.6 million
4. 65.8 million

[Answer for ACCUPLACER Review Problem 7](https://youtu.be/8xr-d6w3D_w)

1. Which one of the following is equivalent to the expression:

 

1. 4
2. 6
3. 0
4. – 3

[Answer for ACCUPLACER Review Problem 8](https://youtu.be/_ObW-1NleZc)

1. Water runs from a pump at a rate of 2.5 gallons per minute. At this rate, how long it will take to fill a tub that has a 250 – gallon capacity?
2. 10 minutes
3. 100 minutes
4. 1000 minutes
5. 25 minutes

[Answer for ACCUPLACER Review Problem 9](https://youtu.be/Xi6J8DyBO2Q)

1. The volume of a right rectangular prism is given by multiplying the length of the base by the width of the base by the height of the prism. If the prism has a volume of 300 cubic feet and a height of 5 feet, what is the area of the base?
2. 200 square feet
3. 400 square feet
4. 30 square feet
5. 60 square feet

[Answer for ACCUPLACER Review Problem 10](https://youtu.be/_DXXlxSw5fw)

1. Diana followed a recipe that requires 3 cups of water for every 5 cups of flour. If she used 15 cups of flour, how many cups of water did she use?
2. 6
3. 18
4. 9
5. 45

[Answer for ACCUPLACER Review Problem 11](https://youtu.be/qr-aZ7RfacQ)

1. Which one of the following is equivalent to the expression: 6 ( x + 2 ) + 4x + 1
2. 10x + 1
3. 10x + 13
4. 6x – 1
5. 6x + 1

[Answer for ACCUPLACER Review Problem 12](https://youtu.be/JxjU2h_z-FA)

1. It took John 90 minutes to finish 40 problems. Which of the following is an equivalent rate?
2. 10 problems in 0.9 minutes
3. 10 problems in 2.25 minutes
4. 10 problems in 9 minutes
5. 10 problems in 22.5 minutes

[Answer for ACCUPLACER Review Problem 13](https://youtu.be/yL-P3NcwFFU)

1. The table below shows a survey of 50 registered voters in a city. Each voter was asked whether they planned to vote “ yes” or “ no ” on two different issues. If a voter who plans to vote ” yes ” on issue P is randomly selected, what is the probability that voter also plans to vote “ yes “ on

issue Q?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Plans to vote “yes” on issue Q | Plans to vote“no” on issue Q | Total |
| Plans to vote “yes” on issue P | 8 | 12 | 20 |
| Plans to vote“no” on issue P | 14 | 16 | 30 |
| Total | 22 | 28 | 50 |

1. 0.16
2. 0.36
3. 0.40
4. 0.67

[Answer for ACCUPLACER Review Problem 14](https://youtu.be/fLdjZQMyKoQ)

1. Which of the following is equivalent to the expression:  ?
2. 
3. 
4. – 6
5. – 8

[Answer for ACCUPLACER Review Problem 15](https://youtu.be/lMM9ZMEyQbo)

1. Which of the following is equivalent to the expression: 
2. 
3. 
4. 
5. 

[Answer for ACCUPLACER Review Problem 16](https://youtu.be/oYZjzf5RDZ8)

1. The elevation at summit A is 4,418 meters above sea level. Climbers begin at summit B that has an elevation of 2,550 meters above sea level. What is the change in elevation to the nearest foot between the two summits? ( 1foot = 0.3048 meters )
2. 569 feet
3. 5,604 feet
4. 6,129 feet
5. 14,495 feet

[Answer for ACCUPLACER Review Problem 17](https://youtu.be/BXJKci8WxEI)

1. The two lines given below intersect in the x-y plane. What is the value of y-coordinate of the point of intersection?



1. – 3
2. 3
3. – 6
4. 6

[Answer for ACCUPLACER Review Problem 18](https://youtu.be/ulm5K0NcvbM)

1. Given the sets:   

Which of the following represents 

1. 
2. 
3. 
4. 

[Answer for ACCUPLACER Problem 19](https://youtu.be/kukv5hh2Mec)

1. In the graph below, the triangle PQR is reflected across x-axis to produce P’Q’R’. What are the coordinates of Q’?
2. ( 1, 3 )
3. ( 0**.**4, – 1 )
4. ( 3, 2 )
5. ( 2, 3 )

[Answer for ACCUPLACER Problem 20](https://youtu.be/O_oADw2gtuo)