40

Name: _____

Selected Response: 10 Marks

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

1. Carson drives $1\frac{1}{2}$ hours to his aunt's home in Rocky Harbour. When he reaches his aunt's, she sends him to a store that is $\frac{3}{4}$ of an hour away. He took the same amount of time to return to his aunt's and then home. What is the total number of hours Carson spends in his car?

   A) $2\frac{1}{4}$ B) $2\frac{3}{4}$ C) 3 D) $4\frac{1}{2}$

2. When Josie adopted her kitten, it weighed 1.59 kilograms. Two weeks later, the kitten weighed 1.70 kilograms. Josie guessed that after the first week, the kitten may have weighed about 1.65 kilograms. Which explanation gives a logical argument for Josie's guess?

   A) Josie compared the digits in the hundredths place of the two numbers.

   B) Josie added 1.59 + 1.70 and then divided by 2.

   C) Josie divided 1.70 ÷ 1.59.

   D) Josie subtracted the fractional parts to the right of the decimal point.

3. Which list shows the numbers in order from ***GREATEST TO LEAST***?

   A $\sqrt{2}, \frac{1}{3}, 0.33, -0.02, -1.01, -\sqrt{7}$

   B $-\sqrt{7}, -1.01, -0.02$

   C $-\sqrt{7}, -1.01, -0.02, 0.33, \frac{1}{3}, \sqrt{2}$

   D $0.33, \frac{1}{3}, \sqrt{2}$

4. Which number is NOT rational?

   A $\sqrt{24}$
   B $0.\overline{01}$
   C $-\sqrt{16}$
   D $\frac{7}{8}$

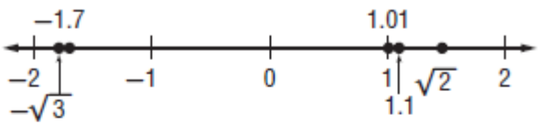
5. Which answer choice is another way to write the repeating decimal 2.056363…?

   A 2.056363
   B $2.0\overline{56363}$
   C $2.0\overline{563}$
   D $2.05\overline{63}$

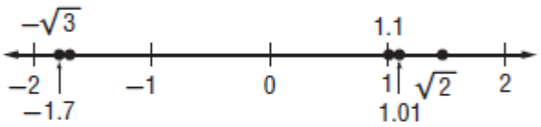
6. Which is the graph of the set of numbers listed below?

$$\{1.1, -\sqrt{3}, \sqrt{2}, 1.01, -1.7\}$$

A



B



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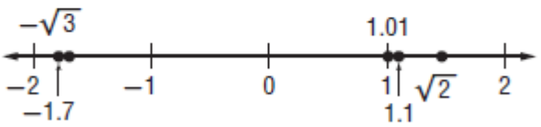
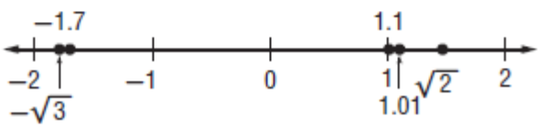


D



7. Which rational number lies between $-\sqrt{60}$ and -7.74?

A -7.752
B -7.746
C -7.744
D -7.69

8. Which statement best describes the set of rational numbers?

A Any number that can be written as the quotient of two integers, $\frac{a}{b}$, where b is not zero.
B They are numbers whose decimal form neither terminates nor repeats.
C The set $\{0, 1, 2, 3, \ldots\}$.
D They are the whole numbers and their opposites.

9. What is the sum of $\frac{1}{2}, 0.\overline{3}$, and 0.1?

A $\frac{1}{60}$
B $\frac{1}{16}$
C $\frac{5}{6}$
D $\frac{14}{15}$

10. Which rational number is not equivalent to the others?

a) $-3 \div 4$

b) $\frac{-3}{4}$

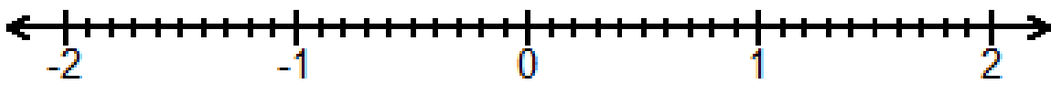
c) $\frac{3}{-4}$

d) $\frac{-3}{-4}$

11. Louise calculated $\frac{1}{2} - \left(-\frac{2}{3}\right) \div \frac{4}{3}$. Indicate where she made her mistake and solve the problem correctly. [4 marks]

$$= \left(\frac{1}{2}\right) - \left(-\frac{2}{3}\right) \times \left(\frac{3}{4}\right)$$
$$= \left(\frac{1}{2}\right) - \left(-\frac{6}{12}\right)$$
$$= \left(\frac{1}{2}\right) - \left(-\frac{1}{6}\right)$$
$$= \left(\frac{3}{6}\right) + \left(\frac{1}{6}\right)$$
$$= \frac{4}{6} = \frac{2}{3}$$

12. Indicate where these numbers lie on the number line; $-1.9, 1\frac{2}{5}, \frac{-11}{10}, \frac{8}{9}, -1.789, \frac{-1}{3}$ [3 marks]



13. Find the missing value in each. [3 marks]

a) 2.3 x ____ = -12.6 b) –48 ÷ ____ = -8 c) ___ $-\frac{3}{4} = \frac{-1}{2}$

14. Replace the blank with < *or* > [4 marks]

a) –2.33….. ____ $-2\frac{1}{4}$ b) $\frac{1}{8}$ ____ – 0.125 c) –4 ____ -4.001 d) $\frac{6}{7}$ ____ $\frac{7}{8}$

15. Calculate the following. Show YOUR WORK! [6 marks]

a) $-2\frac{4}{5} + 1\frac{2}{3}$ b) $\frac{3}{4} - \left(\frac{-5}{6}\right)$ c) $-2\frac{1}{3} \div \left(-1\frac{3}{4}\right)$

16. A) The temperature in Florida is 18.4 ^0c on the first of this month. The temperature in Yellowknife is -24.8^oC. Write an **equation** to find the difference in temperature between the 2 locations. Be sure to state the answer and use the proper signs. [3 marks]

B) The lowest point on land in North America is Death Valley at 86 m below sea level. The highest point is the peak of Mt. McKinley at 6279.7 m about sea level. How can you use rational numbers to calculate the distance between these two points? Show it with an equation and find the difference between the two points. [3 marks]

C) A weird restaurant puts the prices of its items on the menu in fraction form.

A veggie burger cost $11\ ¾$. On Saturday's the sale price was $^2/_5$ of the full price. Fries are priced at $2\frac{1}{5}$. What was the price of a veggie burger and fries on Saturday? Solve the problem first using fractions and then using decimals. [4 marks]