

Name:

Date:

Period:

### Math 7 -- Unit 2 Study Guide

**Solve and write your answer in simplest form. Convert improper fractions to mixed numbers. Show all work!**

1)  $-2\frac{1}{3} - 1\frac{3}{4} =$

5)  $3\frac{1}{2} - 4\frac{1}{6} =$

2)  $-\frac{2}{3} \div \frac{5}{6} =$

6)  $-\frac{3}{5} \times -1\frac{1}{10} =$

3)  $-3.99 + 14.4 =$

7)  $-14.2 - 9.7 =$

4)  $(-3.2)(1.25) =$

8)  $-5.4 \div 0.9 =$

9) Charlie walks  $\frac{9}{8}$  miles around the lake. How many miles did Charlie walk as a decimal?

10) Joe's apple weighs  $\frac{4}{5}$  lb. Marta's apple weighs 0.5 lb. How much more does Joe's apple weigh than Marta's? (Hint: Convert both weights into the same form.)

11) Put the following numbers in order from least to greatest.

$$0.7, -\frac{1}{5}, \frac{1}{3}, -0.85$$

12) Mrs. Troxler has 40 feet of fabric to make bows for her cheerleaders. Each bow uses 1.5 feet of fabric. How many full bows can she make?

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13) A seal dives to a depth of  $-\frac{3}{4}$  mile below the surface of the water. A penguin's depth is  $\frac{1}{3}$  of the seal's depth. What is the penguin's depth? *(Show your work to support your answer.)*

A)  $-\frac{9}{4}$  miles

B)  $-\frac{1}{4}$  mile

C)  $\frac{1}{4}$  mile

D)  $\frac{9}{4}$  miles

14) On Monday, the value of a stock decreased by  $\frac{1}{2}$  point. On Tuesday, the value increased by  $\frac{3}{4}$  point. On Wednesday, the value decreased by  $\frac{3}{8}$  point. What number represents the change in stock value after the three days?

15) Beth plays a videogame in which she starts with 0 points. In round 1, she loses 3.6 points; in round 2 she wins 13.45 points, and in round 3 she loses 8.3 points. What is her final score?

16) Nolan correctly spelled  $\frac{7}{8}$  of his spelling words. How is  $\frac{7}{8}$  written as a decimal?

Convert the following rational numbers, state whether they terminating or repeating decimals.

17)  $\frac{3}{8}$

18)  $-\frac{2}{9}$

19) 0.875

20) - 2.05