Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7.NS.3

\_\_\_\_\_1. The table shows prices for shoe rental, games, and snacks at the bowling alley. (2014)



 Gina rented shoes, bowled 3 games, and bought 1 order of nachos. She used a coupon

 for $\frac{1}{2}$ off the price of her bowling games. What was Gina’s total cost before tax was added?

A**.** $5.75 B. $6.00 C. $8.25 D. $12.00

\_\_\_\_\_2. Scientists determined that Antarctica’s average winter temperature was −34.44°C. The

 difference between this temperature and Antarctica’s highest recorded temperature

 was 49.44 degrees. What was Antarctica’s highest recorded temperature? (2014)

A. −83.88°C B. −15°C C. 15°C D. 83.88°C

\_\_\_\_\_3. Evaluate. (2015) (no calculator)

(− $\frac{7}{10}$ + .15) ÷ (−0.125)

A. −6.8 B. −4.4 C. 4.4 D. 6.8

\_\_\_\_\_4. What is the value of ($ -\frac{1}{4}- \frac{1}{2})÷(-\frac{4}{7} )$? (2015) (no calculator)

A. −1$ \frac{5}{16}$ B. − $\frac{3}{7}$ C. $\frac{3}{7}$ D. 1$ \frac{5}{16}$

\_\_\_\_\_5. Travis, Jessica, and Robin are collecting donations for the school band. Travis wants to collect

 20% more than Jessica, and Robin wants to collect 35% more than Travis. If the students meet

 their goals and Travis collects $43, how much money did they collect in all? (2015)

A. $106.78 B. $128.60 C. $136.88 D. $144.99

\_\_\_\_\_6. Amber determined that the expression $\frac{-\frac{1}{2}}{-\frac{41}{15}}$ is equivalent to $\frac{15}{82}$ . Which statement

 describes the process Amber could have used? (calculator allowed) (2015)

A. She divided $-\frac{1}{2}$ by -15 and then divided the result by 41.

B. She multiplied $-\frac{1}{2}$ by -15 and then divided the result by 41.

C. She divided $-\frac{1}{2}$ by -15 and then multiplied the result by 41.

D. She multiplied $-\frac{1}{2}$ by -15 and then multiplied the result by 41.

\_\_\_\_\_7. A pile of newspapers in Ms. McGrath’s art class was $17\frac{3}{4}$ inches high. Each consecutive week,

 for the next 5 weeks, the height of the pile of newspapers increased by $8\frac{7}{12}$ inches. What was

 the height, in inches, of the pile after 3 weeks? (calculator allowed) (2015)

A. 25$ \frac{3}{4}$ B. 26$ \frac{1}{4}$ C. 42$ \frac{1}{4}$ D. 43$ \frac{1}{2}$

\_\_\_\_\_8. What is the value of the expression $\frac{\left(\frac{2}{3} - \frac{ 5}{6}\right)}{\frac{3}{4}}$ ? (2016) (no calculator)

A. $-\frac{2}{9}$ B. $-\frac{1}{8}$ C. $\frac{1}{8}$ D. $ \frac{2}{9}$

\_\_\_\_\_9. Three friends own a landscaping business. The number of hours each friend spent on the same

 project is shown in the table below.

**HOURS WORKED ON LANDSCAPING PROJECT**

|  |  |
| --- | --- |
| **Name** | **Hours Worked** |
| Edgar | $$17\frac{1}{4}$$ |
| Kelly | $$18\frac{1}{4}$$ |
| Shawn | $$14\frac{1}{2}$$ |

In total, they earned $850 for the job. They put 15% of this amount into a joint savings account for future expenses. They then divided the rest proportionally based on the number of hours each worked. How much money did Shawn receive? (2016)

 A. $209.53 B. $240.84 C. $283.48 D. $295.11

\_\_\_\_\_10. The width of a rectangle is 6$ \frac{2}{3}$ inches. The length of the rectangle is twice its width.

 What is the perimeter of the rectangle? (2017)

1. 20 inches B. 40 inches C. 30$ \frac{2}{3}$ inches D. 88$ \frac{8}{9}$ inches

\_\_\_\_\_11. The table below shows the lowest temperature, in degrees Fahrenheit, on each of 5 days for a city.



 What is the mean lowest temperature, in degrees Fahrenheit, in the city for those 5 days? (2018)

1. -18.8° B. -6.8° C. 6.8° D. 18.8°

\_\_\_\_\_12. Three classes at a junior high school raised money to buy new computers. (2018)

* Ms. Moore’s class raised $249.00
* Ms. Aguilar’s class raised $396.62 more than Ms. Moore’s class
* Mr. Barry’s class raised $430.43 less than Ms. Aguilar’s class

 What is the total amount of money raised by all three classes?

1. $215.19 B. $464.19 C. $1,076.05 D. $1,109.81

\_\_\_\_\_13. Last week, the price of apples at a grocery store was $1.60 per pound. This week, apples at the

 same grocery store are on sale at a 10% discount. What is the total price of 4 ½ pounds of

 apples this week at the grocery store? (2019)

1. $4.77 B. $6.48 C. $6.75 D. $6.93

14. Last week Rachel power walked $2\frac{3}{5}$ miles per day on each of the 7 days. During the same week, she

 also jogged $5\frac{3}{4}$ miles per day on 4 days. What was the total number of miles Rachel power walked and

 jogged last week? (2015)

***Show your work.***

***Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***miles

15. Explain the steps needed to determine the value of the expression shown below. Be sure to provide

 the correct value of the expression in your explanation. (2016)

$$\frac{\frac{1}{2}}{-\frac{2}{5}}+(-\frac{1}{4})$$

**Answer**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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16. Ruby’s Market sells smoked meats by the pound. The prices for several different meats are shown in

 the table. (2016)

**RUBY”S MARKET PRICES**

|  |  |
| --- | --- |
| **Type of Meat** | **Price per pound** |
| Beef | $4.25 |
| Chicken | $2.50 |
| Sausage | $3.25 |
| Turkey | $2.85 |

 How much more does $1\frac{1}{4}$ pounds of beef cost than $1\frac{1}{4}$ pounds of turkey?

 **Show your work.**

**Answer** $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Brad has $10 to spend at Ruby’s. He orders $\frac{1}{2}$ pound of sausage and $1\frac{1}{4}$ pounds of chicken. How

 much money will Brad have left after he pays for this order?

 **Show your work.**

**Answer** $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. A school club needs 300 feet of rope for a project. They have the amounts of rope listed below.

 (2017)

• 2 pieces of rope that are each 16 yards in length

• 1 piece of rope that is 12.5 yards in length

• 1 piece of rope that is 123.25 feet in length

 How much additional rope, in feet, does the school club need in order to have enough rope

 for their project?

 ***Show your work.***

***Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** additional feet of rope

18. The table below shows the weekly change in the price of one gram of gold for four weeks.

 (2017)

 By how much did the price of one gram of gold change from the beginning of week 1 to

 the end of week 4? Did the price increase or decrease?

 ***Explain how you found your answer.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 At the end of week 4, the price per gram of gold was $39.28. What was the price per gram

 of gold at the beginning of week 1?

 ***Show your work.***

***Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***price per gram of gold

19. Mr. Trager has $500.00 to spend at a bicycle store. All the prices listed below include tax. (2018)

* He buys a new bicycle for $273.98.
* He buys 3 bicycle reflectors for $7.23 each and 1 bicycle helmet for $42.36.
* He plans to use the remaining money to buy new cycling outfits for $78.12 each.

 What is the **greatest** number of cycling outfits that Mr. Trager can buy with the remaining money?

 ***Show your work***

**Answer** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_cycling outfits

20. Jen’s goal is to run a total of 22 miles in five days. The table below shows her log for the number of

 miles she ran on Monday, Tuesday, Wednesday, and Thursday. (2018)



 How many miles must Jen run on Friday to reach her goal?

 ***Show your work.***

**Answer** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_miles

21. A candy store sells caramels and milk chocolate by the pound. The table below shows the total cost,

 in dollars, for a pound of each type of candy the store sells.



 How much more is the cost of 1 ¾ pounds of milk chocolate than the cost of 1 ¾ pounds of

 caramels? (2019)

***Show your work.***

**Answer** $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_