Grade Eight Review for Final – Unit 5

Multiple Choice Section

1.   What is 75% of 36?

   A)   21   B)   24   C)   27   D)   30

2.   Jesse bought a Sidney Crosby rookie card for $80.00. He then sold it to a friend for $120.00. What was the percentage of increase?

   A)   25%   B) $33\frac{1}{3}$%   C)   40%   D)   50%

3.   Jacob is preparing juice for his lemonade stand. The ratio of juice concentrate to water is $1:4$. How much juice concentrate does he need if he uses 12 L of water?

   A)   3 L   B)   4 L   C)   16 L   D)   48 L

4.   Nancy bought 3 kg of blue potatoes for $6.57. How much would 5 kg of these blue potatoes cost?

   A) $10.95   B) $11.57   C) $13.14   D) $32.85

5.   Hugh makes a salad dressing that calls for 150 ml of olive oil for every 200 ml of vinegar. What amount of vinegar is needed to mix with 270 ml of olive oil?

   A)   202.5 ml   B)   350 ml   C)   360 ml   D)   400 ml

6.   Doreen is buying 2.8 kg of steak at $17.20 per kg, 0.8 kg of shrimp at $32 per kg, and two loaves of French bread for $2.29 each. How much change will she receive if she hands the cashier a $100 bill?

   A) $21.66   B) $24.05   C) $44.91   D) $78.34

7.   If 3 cans of milk cost $2.40, what is the cost of 5 cans of milk?

   A) $0.80   B) $4.00   C) $4.80   D) $12.00

8. If $x:5=9:15$, what is the value of x?

A) 1   B) 3   C) 9   D) 27

9. If Jessica scored 15 out of 20 questions correct on a spelling test, what percent did she receive?

A) 15%   B) 35%   C) 75%   D) 95%

10. 10% of a number is 20. What is the number?

A) 0.5   B) 2   C) 30   D) 200

11. At a grade eight math competition there are 4 boys to every 5 girls. If there are 45 students at the competition how many of them are boys?

A) 4   B) 20   C) 25   D) 36

12. Last year a can of Crimson Cow cost $1.60. This year it costs $2.00. What is the *percent increase*?

A) 0.40%   B) 20%   C) 25%   D) 40%

13. What is 120 % of 80?

A) 9.6   B) 96   C) 960   D) 9600

14. Represent 125 % as fraction in lowest terms.

A) $\dfrac{1.25}{100}$ B) $\dfrac{0.125}{10}$ C) $\dfrac{5}{4}$ D) $\dfrac{25}{2}$

15. Four-hundred people attended the teenage dance on Saturday. This was 80% of the people who attended the dance last week. How many people attended the dance last week?

A) 5   B) 320   C) 500   D) 32000

16. At Moo-Mart a 1-Liter carton of milk costs $1.99. It used to cost $2.79. What is the *percent decrease* in cost?

   A)   28.7%   B)   39.2%   C)   40.2%   D)   71.3%

17. A car travels $80\,km/h$. How far does it travel in 4 hours?

   A)   20 km   B)   80 km   C)   160 km   D)   320 km

18. Represent 133% as a fraction.

   A) $\dfrac{1.33}{100}$ B) $\dfrac{13.3}{100}$ C) $\dfrac{133}{100}$ D) $\dfrac{1330}{100}$

19. What is 30% of 800?

   A)   24   B)   240   C)   2400   D)   24000

20. One store charges $1.80 for a souvenir pin. A second store charges $1.20 for the same pin. What is the percent decrease between the prices of these two pins?

   A)   0.33%   B) $33\dfrac{1}{3}\%$ C)   50%   D) $66\dfrac{2}{3}\%$

21. A recipe for baking muffins requires 50 g of chocolate chips for every 600 g of flour. How many grams of chocolate ships will be required if 1800 g of flour is used?

   A)   50 g   B)   150 g   C)   450 g   D)   1250 g

22. In Mr. Smith's class, there are 2 boys for every 3 girls. If there are 25 students in the class, how many are girls?

   A)   8   B)   10   C)   13   D)   15

23. What value will make the statement true? $6 : 9 = \square : 36$

   A)   4   B)   9   C)   24   D)   33

24. A test has 50 questions worth one mark each. You got 14 questions incorrect. What percent will you receive on the test?

   A)   14%   B)   36%   C)   72%   D)   86%

25. What is the 13% sales tax on a pizza costing $15.99?

   A) $0.13   B) $2.08   C) $18.07   D) $208.87

26. A politician was elected by receiving 300 votes. If this number of votes were 60% of the total votes cast, how many votes were there in total?

   A)   180   B)   480   C)   500   D)   600

LONG ANSWER SECTION

27.   Which is the better buy? Show your reasoning.

7 kg of apples for $5.50   **OR**   5 kg of apples for $3.75

28.   Shelley worked for 4.5 hours at a rate of $8.20/h. She bought a gift $29.80 (before 13% tax) for her sister. How much money did she have left over?

29.   A choir has 60 members and 42 of them are men. If 3 men leave the choir and are replaced by 3 women, then what *percent* of the choir are now men?

30. Brittany divided her pie into 10 pieces. Fred divided his pie into 5 pieces. Brittany's parents ate 4 pieces of her pie. If both families wanted to eat the same amount of pie, how many pieces of Fred's pie would his parents have to eat?

31. At the bulk candy store bubble gum outsells jawbreakers by a five-to-one ratio. If the store sells a *total* of 276 pieces of gum and jawbreakers *combined*, how many jawbreakers were sold?

32. Jack wants to buy a shirt that has a regular price of $34.99, and a pair of jeans with a regular price of $59.99. The store is offering a 15% discount on all clothes.

   A) What would be the *total discount amount* on *both* items?

   B) What is the *combined sale price* of *both* items before tax?

   C) The store charges 13% tax. What will be the final price that Jack pays for the shirt and the jeans?

33. In a certain country there are 36 000 cars. 0.2% are Ferrari and 1.4% are Saab. How many more Saab are there than Ferrari?

34. The ratio of boys to girls in a sports club is 4:5.   There are a total of 15 girls in the club. How many boys are in the sports club?

35. A hockey card purchased in 1988 for $3 was sold in 2008 for $42. What is the percent increase in its value?

36. Last summer, 350 people were registered with the *Eastern Soccer Association*. This summer there are 250 people registered. What is the percent decrease in the number of people registered for soccer?

37. Six 500 ml bottles of Crystal Clear water costs $4.95. Twenty 500 ml bottles of Mountain Spring water costs $17.95. Explain which brand of water, Crystal Clear or Mountain Spring, is the better buy?

38. The regular price of a pair of skates is $299.99. The skates are on sale for 30% off.

    A) What is the discount amount?

    B) What is the sale price of the skates *without* tax?