

GRADE 8 REVIEW TEST**DO NOT WRITE ON THIS PAPER!!**1. Simplify: $3x - 7 + 5x + 8$

- A)
- $-5x + 15$
- B)
- $2x + 1$
- C)
- $8x - 15$
- D)
- $8x + 1$

2. Simplify: $m + m + 3m + 4$

- A)
- $3m + 4$
- B)
- $5m - 4$
- C)
- $5m + 4$
- D)
- $2m + 3m + 4$

3. Evaluate: $(-2) \times (5) \times (-6)$

- A)
- -30
- B)
- -60
- C)
- 30
- D)
- 60

4. Evaluate: $\left(-\frac{3}{4}\right) \div \left(\frac{1}{4}\right)$

- A)
- $-\frac{3}{4}$
- B)
- -3
- C)
- $\frac{12}{4}$
- D)
- $-\frac{3}{16}$

5. Evaluate: $\frac{2}{3} - \frac{1}{6}$

- A)
- $\frac{1}{2}$
- B)
- $-\frac{1}{2}$
- C)
- $-\frac{1}{3}$
- D)
- $\frac{1}{6}$

6. Evaluate: $\frac{2}{3} + \frac{7}{4} \times \frac{-8}{14}$

- A)
- $-\frac{1}{3}$
- B)
- $\frac{-54}{56}$
- C)
- $\frac{-54}{53}$
- D)
- $\frac{1}{3}$

7. Evaluate: $4^3 - 2^3$

- A)
- 8
- B)
- -8
- C)
- 72
- D)
- 56

8. Determine the value of x in the proportion: $3 : 5 = x : 15$

- A)
- 5
- B)
- 9
- C)
- 6
- D)
- 3

9. Determine the value of x that satisfies the equation: $4x = 20$

- A)
- 5
- B)
- 4
- C)
- 6
- D)
- 20

10. Evaluate: $3^2 - 4 \times 2$

- A)
- -1
- B)
- 4
- C)
- -2
- D)
- 1

11. Evaluate: $3 + 12 \div 3$

- A) 7 B) 5 C) 6 D) 12

12. Last year there were 1940 students at Fletcher's Meadow Secondary School. This year there are 15% less students than last year. How many students are at Fletcher's Meadow this year?

- A) 2231 B) 1649 C) 1925 D) 1807

13. The value of -3^2 is

- A) 9 B) 6 C) -9 D) -6

14. Which of these is equal to y^3 ?

- A) $y + y + y$ B) $y + 2y$ C) $(y)(2y)$ D) $(y)(y)(y)$

15. The table represents a linear relationship between x and y . What is the missing number in the table?

| x | y |
|-----|-----|
| 1 | 1 |
| 2 | |
| 3 | 7 |

- A) 2
B) 4
C) 6
D) 8

16. Sajeeda combines 5 litres of red paint, 2 litres of blue paint and 2 litres of yellow paint. What is the ratio of red paint to total paint?

- A) 5:2 B) 9:4 C) 5:4 D) 5:9

17. The temperature outside is -5°C on Monday. Overnight it drops by 3°C . Between 9am and noon the next day it rises 2°C . What is the temperature on Tuesday at noon?

- A) -6°C B) 0°C C) -4°C D) -10°C

18. The opposite angle theorem (OAT) states that:

- A) Adjacent Angles are equal
B) The sum of opposite angles is 180°
C) The sum of opposite angles is 360°
D) Opposite angles are equal

19. Find the value of the expression $-3k - 4k^2 + 4h - 7$ if $k = -3$ and $h = 4$

- A) 18 B) -18 C) 54 D) 42

20. Evaluate $5 - 3(2-6)^3$

- A) 128 B) -187 C) -128 D) 197

Multiple Choice Answers:

- 1) ____ 2) ____ 3) ____ 4) ____ 5) ____ 6) ____ 7) ____ 8) ____ 9) ____ 10) ____
 11) ____ 12) ____ 13) ____ 14) ____ 15) ____ 16) ____ 17) ____ 18) ____ 19) ____ 20) ____

Open Response: Show ALL work for full marks!

21. Two groups of tourists each have 60 people. 75% of the first group and $\frac{2}{3}$ of the second group board a bus to travel to a museum. How many more people from the first group boarded the bus? **(4)**

22. Find the volume of a cylinder with height 25cm and radius 5cm. **(4)**
 Hint: $V = \pi r^2 h$

23. A rectangle's length is 4 times bigger than it's width. If the width of the rectangle is 3.5cm. What is the **perimeter** and **area** of the rectangle? **(4)**

24. You want to purchase a new Computer. The computer costs \$449 plus \$129 for software. What is the total cost of your purchase including 13% HST? **(4)**

25. Justin has 4 more marbles than Lee, and Cindy has 3 times as many marbles as Justin. If Lee has n marbles, write an expression that could be used to determine how many marbles Cindy has. **(4)**