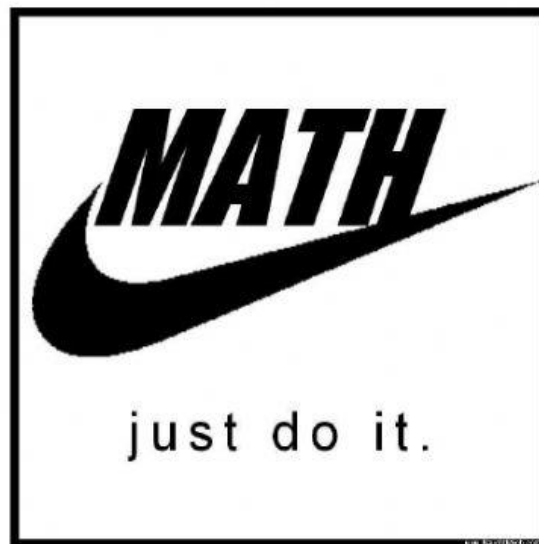


# Grade Seven Mathematics

Term Two Exam – June 2019



This is last year's June exam.

It will NOT count towards your grade.

No preparation is expected.

It is simply an opportunity to give you more exposure to exams and to summarize the grade 7 math course.

Calculators allowed and teacher assistance will be provided.



Part B

$$\frac{\quad}{81} = \frac{\quad}{105}$$

Read each question **carefully** and **show your work**. Use your time wisely, answering easier questions first and the more difficult ones later. Good luck!

**Part A – Multiple Choice (24 marks; 1 mark each)**

Tear off the last sheet of this exam. Write your answers in the corresponding spaces.

1. Convert 9% to decimal form.

a) 0.9                      b) 9.0                      c) 0.009                      d) 0.09

2. Solve:  $h - 20 = 25$

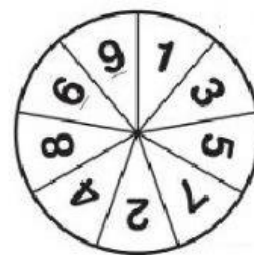
a) 45                      b) 5                      c) 55                      d) 35

3. Which of the following numbers is a composite number?

a) 31                      b) 13                      c) 27                      d) 23

4. A spinner has the numbers 1 through 9. What is the probability of spinning it once and getting a composite number?

a)  $\frac{4}{9}$                       b)  $\frac{5}{9}$                       c)  $\frac{3}{9}$                       d)  $\frac{2}{3}$



5. Convert  $6\frac{3}{7}$  into an improper fraction.

a)  $\frac{45}{7}$                       b)  $\frac{42}{7}$                       c)  $\frac{3}{45}$                       d)  $\frac{16}{7}$

6. Sophie works at Burger City. Last week she worked 6 hours and got paid \$72. What is her hourly rate?

a) \$ 12                      b) \$ 11                      c) \$ 10                      d) \$ 9

7. Which algebraic expressions represents the following:

*The total cost of a field trip is the cost of pizza at \$4 per student added to the cost of drinks at \$2 per student plus \$200 for the bus.*

a)  $8p + 200$                       b)  $200 - 4p$                       c)  $4p + 2p + 200$                       d)  $6p + 200$

8. Which of the following ratios is NOT equivalent to 3:5 ?

a) 12:20                      b) 6:10                      c) 9:15                      d) 15:30

9. Which of the following statistics do outliers tend to affect the most?

a) mode                      b) mean                      c) median                      d) affects these equally

10. What is the area of a square if one side measures 12 cm?

a)  $24 \text{ cm}^2$                       b)  $48 \text{ cm}^2$                       c)  $144 \text{ cm}^2$                       d)  $12 \text{ cm}^2$

11.  $(-1) - (-4)$

a) -5                      b) +3                      c) +5                      d) -3

12. Which is NOT a factor of 60?

- a) 120
- b) 15
- c) 60
- d) two of the above are not factors

13. Solve  $(+3) \times (-8)$

- a) -24
- b) +24
- c) -5
- d) -11

14. Which is greater?

- a) 38%
- b) 0.4
- c)  $\frac{1}{4}$
- d) 0.05

15. Solve  $4x - 2y^3$  if  $x = 4$ ,  $y = 2$

- a) 4
- b) 0
- c) -4
- d) 32

16. Which integer is greater?

- a) (-12)
- b) (-11)
- c) (-13)
- d) (-10)

17. Which of the following sets of data contain an outlier:

- a) 5, 7, 7, 9, 12
- b) 46, 46, 47, 49, 50, 55
- c) 109, 114, 115, 133, 210, 211
- d) all of the sets of data above contain an outlier
- e) none of the sets of data above contain an outlier

18.  $(-1) + (-1) - (+1) - (-5) + (+1)$

- a) +2
- b) +3
- c) +5
- d) -7

19. What is the probability of rolling one die and getting a 5?

- a)  $\frac{5}{6}$
- b)  $\frac{1}{6}$
- c)  $\frac{2}{3}$
- d)  $\frac{1}{5}$



20. Find 6% of 50?

- a) 3
- b) 6
- c) 9
- d) 30

21. Solve  $4^3$

- a) 12
- b) 64
- c) 16
- d) 81

22. Solve  $(-6) + (-4) \div (-2)$

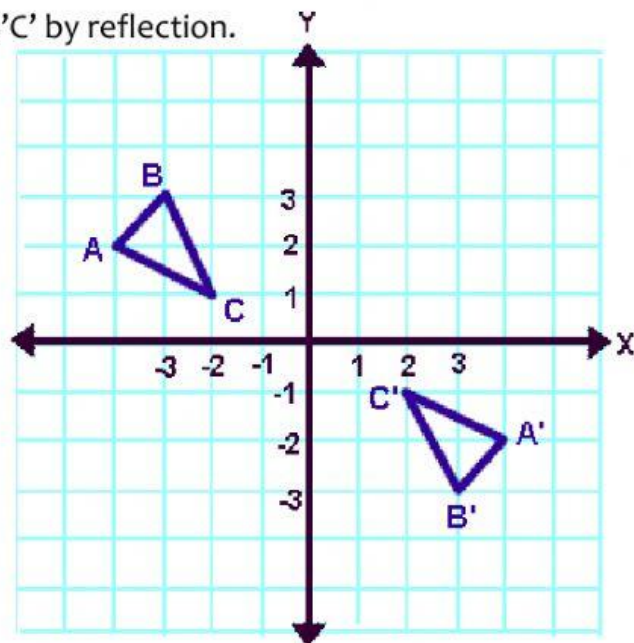
- a) (+5)
- b) (-4)
- c) (+1)
- d) (-8)
- e) (-5)

23. Find 8% of 3000

- a) 240
- b) 24
- c) 24,000
- d) 375

24. The following can be said about figures ABC and A'B'C' below:

- a) You can get from ABC to A'B'C' by translation.
- b) You can get from ABC to A'B'C' by rotation.
- c) You can get from ABC to A'B'C' by reflection.



For the purposes of the liveworksheets website, please only enter the final answer for each question. No units, no work shown here (do your work on a separate piece of paper).

**Part B: Calculations** (81 marks)

1. Melanie bought a new calculator priced at \$15. If it was on sale for 12% off, how much would the calculator cost Melanie? Assume there are no taxes. (3)

**ANSWER** >> The calculator would cost \$ \_\_\_\_\_ after the 12% discount was applied.

2. Congratulations, you won the hockey pool! You can choose your prize, either  $\frac{4}{7}$  of a bucket of Smarties or  $\frac{5}{9}$  of a bucket of Smarties. Which do you choose and why? (3)

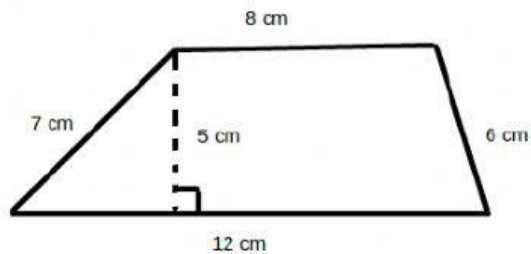
**ANSWER** >> If I wanted the larger bucket of Smarties, I would choose the one that is \_\_\_\_\_ full.

3. What is the GCF and LCM of 12 and 32? (4)

ANSWERS >>

- The GCF of 12 and 32 is \_\_\_\_\_
- The LCM of 12 and 32 is \_\_\_\_\_

4. Calculate the area of the trapezoid. (3)



ANSWER >> The area of the trapezoid is \_\_\_\_\_  $\text{cm}^2$ .