



SAMPLE PROVINCIAL ACHIEVEMENT TEST 1 PART A (NO CALCULATOR)

Use the following information to
answer the next question.

$$\begin{array}{cccc}\sqrt{99} & \sqrt{109} & \sqrt{100} & \sqrt{119} \\ \sqrt{129} & \sqrt{139} & \sqrt{149} & \sqrt{159}\end{array}$$

1. How many of the given square roots have a value between 11 and 12?

Answer: _____

(Record your answer on the answer sheet.)

2. What is the value of $\sqrt{3.24}$ to one decimal place?

Answer: _____

(Record your answer on the answer sheet.)

3. What is the difference between the values of the second power of 3 and the third power of 2?

Answer: _____

(Record your answer as an integer value on the answer sheet.)

4. What is the value of $-3^4 + 5^2 + (-12)^2$?

Answer: _____

(Record your answer as an integer value on the answer sheet.)

5. Evaluate $(15^0)(15^2)$.

Answer: _____

(Record your answer as an integer value on the answer sheet.)

6. What is the value of $\left(\frac{2}{5}\right)^2$?

Express your answer as a decimal to the hundredth.

Answer: _____

(Record your answer on the answer sheet.)

7. Order the following rational numbers from **smallest** value to **greatest** value, using the numbers 1, 2, 3, and 4.

Use the number 1 to represent the **smallest** value and the number 4 to represent the **greatest** value.

Answer: _____

$$-2.5 \quad \frac{4}{6} \quad -\frac{1}{3} \quad 1\frac{8}{12}$$

(Record all **four digits** of your answer on the answer sheet.)

8. What is the value of $217 - 12(5 - 3)^3$?

Answer: _____

(Record your answer as an integer value on the answer sheet.)

9. What is the value of

$$2 - \frac{1}{3} + \frac{1}{4} - \frac{2}{3} + 4 \times \frac{1}{2}$$

expressed as a fraction in simplest form?

Answer:

 (Record the numerator in the first column)
(Record the fraction bar in the second column)
(Record the denominator in the third column)

(Record your answer on the answer sheet.)

10. What is the square root of $\sqrt{3^2 + 4^2}$?

Answer: _____

(Record your answer as a whole number on the answer sheet.)



Use the following information to answer the next question.

Jason's garage has a square shape.
He measured the total area to be 6.25 m^2 .

11. What is the length of one side of the garage?

Answer: _____ m

(Record your answer on the answer sheet.)

12. Evaluate 13^2 .

Answer: _____

(Record your answer as an integer value on the answer sheet.)

13. Solve for x in the following equation.

$$7x + 3 = 4x - 18$$

Answer: $x =$ _____

(Record your answer as an integer value on the answer sheet.)

14. What is the value of r in $4r + 2 = 7r + 11$?

Answer: _____

(Record your answer as an integer value on the answer sheet.)

15. Solve for x in the following equation.

$$\frac{x}{6} = \frac{x}{2} + \frac{5}{4}$$

Express your answer as a decimal to the nearest tenth.

Answer: $x =$ _____

(Record your answer on the answer sheet.)

16. Solve for x in the equation $\frac{-36}{2x} = 1$.

Answer: $x =$ _____

(Record your answer as an integer value on the answer sheet.)

17. Solve for x in the following equation.

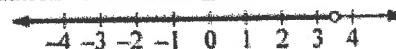
$$3x + 9 = 7x - 19$$

Answer: _____

(Record your answer as an integer value on the answer sheet.)

Use the following information to answer the next question.

The following number line shows the solution set for $12x \geq 36$.



18. How many whole numbers on the given solution set satisfy the inequality?

Answer: _____

(Record your answer as an integer value on the answer sheet.)

19. What is the sum of the coefficients in the simplified expression

$$2x(3x + 1) + 2x(x + 2)?$$

Answer: $x =$ _____

(Record your answer as an integer value on the answer sheet.)

20. What is the coefficient of x^2 when $-4x - 6$ is multiplied by $-5x$?

Answer: _____

(Record your answer as an integer value on the answer sheet.)