Part A: Sample Questions

1. What is $(-2) \times (-1) \times (-3)$?

Answer: _____

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

2. Evaluate $(-1)^2 - (-1)^3 - 1^4$.

Answer: _____

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

3. What is the value

of $\dfrac{(-4)^2 \times (-4)^3 \times (-4)^4}{(-4)^6}$?

Answer: _____

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

4. What is the value of $\dfrac{1}{5} + 0.2 \times \dfrac{2}{3}$ expressed as a fraction in simplest form?

Answer: $\dfrac{\square}{\square}$ (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.)

5. What is the value of $\dfrac{25}{75} \times \dfrac{16}{24} \div \dfrac{8}{27}$ expressed as a fraction in simplest form?

Answer: $\dfrac{\square}{\square}$ (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.)

6. What is the value of $\dfrac{1}{8} + 0.25 + 0.5$ expressed as a fraction in simplest form ?

Answer: $\dfrac{\square}{\square}$ (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.)

7. Given $(4 \times 5)^7 = 4^{\blacksquare} \times 5^7$, what is the value of $\blacksquare$?

Answer: $\blacksquare$ = _____

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

8. In simplest form, what is the value of

$\left(3.25 + \dfrac{3}{4}\right) \div 0.25$?

Answer: _____

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

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9. Solve $\frac{3}{x} = 0.5$.

Answer: $x =$ _____

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

10. Solve for x in the following equation.

$2.6 + x = 4x + 1.4$.

Express your answer to the nearest tenth.

Answer: $x =$ _____

(Record your answer on the answer sheet.)

11. Solve for x in the following equation.

$-2(3x - 4) = 2(x + 6)$.

Express your answer to the nearest tenth.

Answer: $x =$ _____

(Record your answer on the answer sheet.)

12. Solve for x in the following equation.

$0.4(20 - 10x) = 14x - 28$

Answer: $x =$ _____

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

13. Evaluate the expression $-4(7 - 2x)$, where $x = -1$.

Answer: _____

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

14. What is the approximate square root of

$\sqrt{\frac{145}{4}}$ to the nearest whole number?

Answer: _____

(Record your answer on the answer sheet.)

15. 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: _____, _____, _____, _____

$\sqrt{\frac{4}{9}}$ $-1.\overline{5}$ -1.75 $-\frac{8}{5}$

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

16. 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: _____, _____, _____, _____

-0.75 $\frac{-3}{-5}$ $-0.\overline{6}$ $-\left(\frac{-5}{-2}\right)$

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

17. What is the value of $0.4 \div 2 + \sqrt{\frac{9}{36}} \times 1\frac{1}{5}$ expressed as a fraction in simplest form?

Answer: $\dfrac{\square}{\square}$ (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.)

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Inequality Symbols

Symbol 1	Symbol 2	Symbol 3	Symbol 4
$>$	$\geq$	$<$	$\leq$

18. Solve the inequality $10 - 2x \geq -4$.

Answer: x _____ _____

                  Symbol   **Value**
                  number

              (Record in the   (Record in the
                first box)   **second** box)
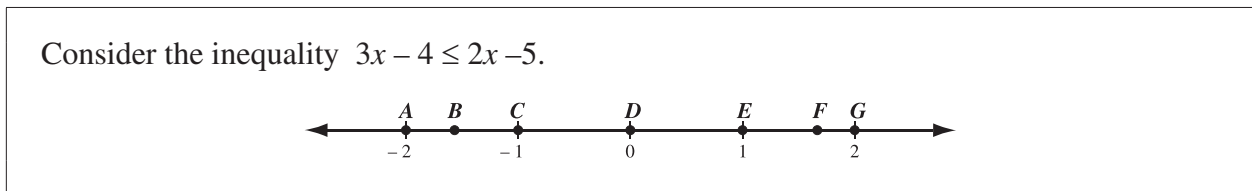
(Record **both digits** of your answer on the answer sheet.)
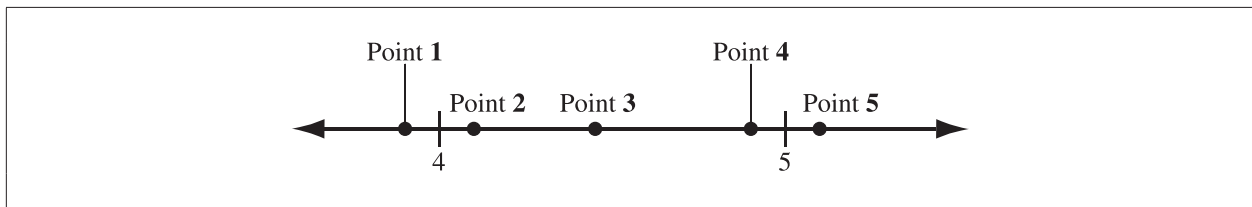
19. Which points **best** represent an approximate value for $\sqrt{17}$, $\sqrt{23}$, and $\sqrt{27}$?

Answer: **Point:** _____ _____ _____
                 Number: $\sqrt{17}$ $\sqrt{23}$ $\sqrt{27}$

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

Consider the inequality $3x - 4 \leq 2x - 5$.

20. How many of the points labelled with a letter on the number line above satisfy the inequality?

Answer: _____ **points**

(Record your answer on the answer sheet.)

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