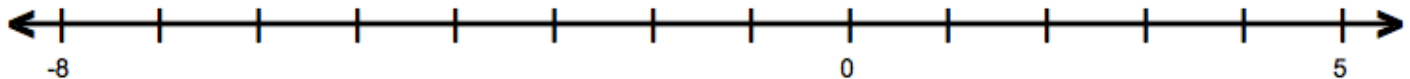


SAGE/Term 4 REVIEW - The Number System

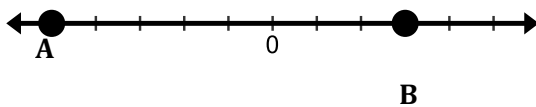
Show your work as you go through each problem. Write all answers as fractions in simplest form. Do NOT write answers in mixed numbers unless the question is contextual.

1. Order the following rational numbers from least to greatest and plot them on the number line below. Remember to label each value on the number line.

$$-7, 3, -1, 0, \frac{1}{4}, \frac{7}{2}, \frac{-5}{8}, \frac{-7}{2}$$



2. Does A or B have the **greatest absolute value**? Explain your answer.



3. Would the following sum be positive or negative? Do not solve the problem! Explain your reasoning.
 $-34 + 78$

4. Would the following product be positive or negative? Do not solve the problem! Explain your reasoning.
 $-46 \cdot 367 \cdot 4$

Simplify each expression.

5. $|-8| = \underline{\hspace{2cm}}$

6. $-|-5| = \underline{\hspace{2cm}}$

7. $10 \div [3 + (2 \cdot -3)] = \underline{\hspace{2cm}}$

8. $20 \div 4(2 - 3)^2 = \underline{\hspace{2cm}}$

9. Simplify $4 - [8 \cdot 9 + (-5)] = \underline{\hspace{2cm}}$

10. $-\frac{6}{5} \cdot \frac{1}{4} = \underline{\hspace{2cm}}$

11. $8 \div -(4 + \frac{1}{3}) = \underline{\hspace{2cm}}$

12. Simplify $(\frac{1}{4})^2 = \underline{\hspace{2cm}}$

13. Simplify $\frac{3}{7} - (\frac{-9}{7}) = \underline{\hspace{2cm}}$

14. Simplify $\frac{5}{4} + \frac{-2}{3} = \underline{\hspace{2cm}}$

15. Simplify $-\frac{8}{3} \div 2 = \underline{\hspace{2cm}}$

16. Simplify $6 \div (-\frac{1}{3}) = \underline{\hspace{2cm}}$