Multiplication as Scaling

Think of multiplication as scaling or resizing.

Example 1: $2\frac{1}{2} \times 5 > 5$

Multiplying a number by a fraction greater than 1 results in a product greater than the starting number.

Example 2: $\frac{3}{4} \times 5 < 5$

Multiplying a number by a fraction less than 1 results in a product less than the starting number.

Example 3: $\frac{2}{2} \times 5 = 5$

Multiplying by a fraction equal to 1 results in a product equal to the starting number.

Without multiplying, decide which symbol belongs in the box: $<, >,$ or $=$.

1. $3\frac{1}{2} \times 3\frac{1}{3} \ \boxed{} \ 3\frac{1}{2}$

2. $\frac{2}{3} \times 2\frac{1}{3} \ \boxed{} \ 2\frac{1}{3}$

3. $8\frac{2}{5} \times \frac{5}{5} \ \boxed{} \ 8\frac{2}{5}$

4. $\frac{3}{4} \times 4\frac{2}{3} \ \boxed{} \ 4\frac{2}{3}$

5. $4\frac{1}{2} \times 1\frac{1}{3} \ \boxed{} \ 1\frac{1}{3}$

6. $\frac{2}{5} \times 5\frac{2}{3} \ \boxed{} \ 5\frac{2}{3}$

7. $3\frac{2}{5} \times \frac{4}{4} \ \boxed{} \ 3\frac{2}{5}$

8. $\frac{5}{8} \times 8\frac{1}{3} \ \boxed{} \ 8\frac{1}{3}$

9. $5\frac{1}{2} \times 6\frac{2}{3} \ \boxed{} \ 6\frac{2}{3}$

10. $\frac{3}{8} \times 2\frac{1}{3} \ \boxed{} \ 2\frac{1}{3}$

11. $10\frac{2}{5} \times \frac{8}{8} \ \boxed{} \ 10\frac{2}{5}$

12. $\frac{1}{2} \times 9\frac{1}{3} \ \boxed{} \ 9\frac{1}{3}$