

Multiplication as Scaling

In **1-20**, without multiplying, decide which symbol belongs in the box: $<$, $>$, or $=$.

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| 1. $2\frac{1}{2} \times 3\frac{2}{3}$ <input type="text"/> $3\frac{2}{3}$ | 2. $\frac{1}{3} \times 9\frac{2}{5}$ <input type="text"/> $9\frac{2}{5}$ |
| 3. $\frac{4}{5} \times 4\frac{2}{3}$ <input type="text"/> $4\frac{2}{3}$ | 4. $1\frac{3}{5} \times \frac{6}{6}$ <input type="text"/> $1\frac{3}{5}$ |
| 5. $5\frac{3}{5} \times \frac{2}{2}$ <input type="text"/> $5\frac{3}{5}$ | 6. $2\frac{1}{3} \times 3\frac{2}{7}$ <input type="text"/> $3\frac{2}{7}$ |
| 7. $6\frac{1}{2} \times 7\frac{2}{3}$ <input type="text"/> $7\frac{2}{3}$ | 8. $4\frac{1}{2} \times 5\frac{2}{3}$ <input type="text"/> $5\frac{2}{3}$ |
| 9. $\frac{3}{5} \times 8\frac{4}{5}$ <input type="text"/> $8\frac{4}{5}$ | 10. $\frac{3}{5} \times 6\frac{4}{5}$ <input type="text"/> $6\frac{4}{5}$ |
| 11. $9\frac{2}{7} \times \frac{3}{3}$ <input type="text"/> $9\frac{2}{7}$ | 12. $7\frac{2}{7} \times \frac{7}{7}$ <input type="text"/> $7\frac{2}{7}$ |
| 13. $\frac{1}{3} \times 1\frac{2}{5}$ <input type="text"/> $1\frac{2}{5}$ | 14. $\frac{1}{3} \times 8\frac{2}{5}$ <input type="text"/> $8\frac{2}{5}$ |
| 15. $2\frac{3}{5} \times \frac{4}{4}$ <input type="text"/> $2\frac{3}{5}$ | 16. $9\frac{3}{5} \times \frac{3}{3}$ <input type="text"/> $9\frac{3}{5}$ |
| 17. $3\frac{1}{3} \times 4\frac{2}{7}$ <input type="text"/> $4\frac{2}{7}$ | 18. $1\frac{2}{3} \times 2\frac{2}{5}$ <input type="text"/> $2\frac{2}{5}$ |
| 19. $5\frac{1}{2} \times 6\frac{2}{3}$ <input type="text"/> $5\frac{1}{2}$ | 20. $3\frac{1}{3} \times \frac{4}{4}$ <input type="text"/> $3\frac{1}{3}$ |

- 21.** Put the following products in order from least to greatest, without multiplying.

$$5 \times \frac{3}{4}, 4\frac{1}{4} \times \frac{3}{4}, \frac{1}{2} \times \frac{3}{4}, \frac{3}{3} \times \frac{3}{4}$$

- 22.** Put the following products in order from greatest to least, without multiplying.

$$6 \times \frac{2}{5}, 3\frac{2}{3} \times \frac{2}{5}, \frac{2}{7} \times \frac{2}{5}, \frac{2}{2} \times \frac{2}{5}$$

- 23.** Melissa and her friends are stretching rubber bands for an activity in science class. Melissa stretched her elastic to 10 inches. Juan stretched it $3\frac{1}{2}$ times as far. Sara stretched it $\frac{4}{4}$ as far. Marsha stretched it $\frac{2}{5}$ as far. Put the students in order of how far they stretched their rubber bands from least to greatest.
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