Name: ..... Class: .....

Scaling whole numbers by fractions

Without evaluating the following expressions, compare them using <, >, or =

N/B

-When you multiply a whole number by a fraction less than 1, the results will be less than the whole number.

-When you multiply a whole number by a fraction equal to 1, the result will be equal to the whole number.

-When you multiply a whole number by a fraction greater than 1, the result will be greater than the whole number.

a. $15 \square 15 \times \frac{6}{4}$

b. $5 \square 5 \times \frac{10}{10}$

c. $17 \times \frac{1}{3} \square 17$

d. $12 \square 12 \times \frac{1}{2}$

e. $\frac{1}{5} \times 25 \square 25$

f. $\frac{1}{2} \times 13 \square 13$

Solution

mathskills4kids

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a. $15 \boxed{<} 15 \times \frac{6}{4}$

Since $\frac{6}{4}$ is greater than 1, it implies that $15 \times \frac{6}{4}$ is greater than 15

So, $15 < 15 \times \frac{6}{4}$

b. $5 \boxed{=} 5 \times \frac{10}{10}$

Since $\frac{10}{10}$ is equal to 1, it implies that $5 \times \frac{10}{10}$ is equal to 5

So, $5 = 5 \times \frac{10}{10}$

c. $17 \times \frac{1}{3} \boxed{<} 17$

Since $\frac{1}{3}$ is less than 1, it implies that $17 \times \frac{1}{3}$ is less than 17

So, $17 \times \frac{6}{4} < 17$

d. $12 \boxed{>} 12 \times \frac{1}{2}$

Since $\frac{1}{2}$ is less than 1, it implies that $12 \times \frac{1}{2}$ is less than 12

So, $12 > 12 \times \frac{1}{2}$

e. $\frac{1}{5} \times 25 \boxed{<} 25$

Since $\frac{1}{5}$ is less than 1, it implies that $25 \times \frac{1}{5}$ is less than 25

So, $\frac{1}{5} \times 25 < 25$

f. $\frac{1}{2} \times 13 \boxed{<} 13$

Since $\frac{1}{2}$ is less than 1, it implies that $13 \times \frac{1}{2}$ is less than 13

So, $\frac{6}{4} \times 13 < 13$