## Lesson 18: Compare Without Multiplying

* Let’s compare expressions, without evaluating them.

### Warm-up: Notice and Wonder: Expressions and Number Lines

What do you notice? What do you wonder?



$\frac{2}{3}×5$

### 18.1: Approximate Location

1. Label each expression at its approximate location on the number line.
* Partner A
	1. $\frac{2}{5}×12$
	2. $\frac{5}{3}×12$
	3. $\frac{7}{7}×12$
* Partner B
	1. $\frac{4}{7}×12$
	2. $\frac{8}{5}×12$
	3. $\frac{9}{9}×12$
* 
* 
1. Choose a number to put in each box to make the statement true.
	1. $\frac{}{11}×12>12$
	2. $\frac{}{15}×12=12$
	3. $\frac{13}{}×12<12$

### 18.2: An Unknown Number

1. 
* The number A is shown on the number line. Label the approximate location of the value of each expression. Explain or show your reasoning.
	+ $\frac{1}{4}×A$
	+ $2×A$
	+ $\frac{13}{8}×A$
	+ $\frac{2}{3}×A$
1. Is $\frac{13}{8}×\frac{11}{39}$ less than, greater than, or equal to $\frac{11}{39}$? Explain or show your reasoning.
2. Is $\frac{2}{3}×\frac{17}{53}$ less than, greater than, or equal to $\frac{17}{53}$? Explain or show your reasoning.



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