Multiplying and Dividing Rational Expressions: Complex Fractions

A train travels for 200 kilometers in $(2 + x)$ hours. Another train travels $(100 + 20x)$ kilometers in 3 hours. Write a rational expression to represent the speed of the second train to the speed of the first train.

Drag and drop your answer to correctly complete the sentence.

The ratio is _____.

$\frac{(5+x)(2+x)}{200}$ $\frac{30}{(5+x)(2+x)}$ $\frac{200}{(5+x)(2+x)}$ $\frac{(5+x)(2+x)}{30}$

Two sports cars are in a race. The first car travels for 300 kilometers in x hours. The other car travels $(200 + 10x)$ kilometers in 2 hours. Write a rational expression to represent the speed of the first sports car to the speed of the second sports car.

- ○ $\frac{60}{x(20+x)}$
- ○ $\frac{30}{x(20+x)}$
- ○ $\frac{100}{x(20+x)}$
- ○ $\frac{10}{x(20+x)}$

Two athletes are in a race. The first athlete runs for 20 kilometers in x hours. Another athlete runs $(10 + 5x)$ kilometers in $(x + 1)$ hours. Write a rational expression to represent the speed of the second athlete to the speed of the first athlete.

- ○ $\frac{x(2+x)}{4(x+1)}$
- ○ $\frac{4(x+1)}{x(2+x)}$
- ○ $\frac{4(x-1)}{x(2-x)}$
- ○ $\frac{x(2-x)}{4(x-1)}$