

Publisher Questions to Western and Northern Canadian Protocol (WNCP) Mathematics Team

1. To what extent are students expected to add, subtract, multiply, and divide signed rational numbers in fraction form? That is, should we include specific questions in both practice and application formats for each of the individual arithmetic operations of addition, subtraction, multiplication, and division of signed rational numbers? Or, should we assume an understanding of the specific operations with fractions and decimals and focus on mixed computations set around order of operations and applications?

3. Demonstrate an understanding of rational numbers by:

- comparing and ordering rational numbers
- solving problems that involve arithmetic operations on rational numbers.

[C, CN, PS, R, T, V]

➤ Order a given set of rational numbers, in fraction and decimal form, by placing them on a number line, e.g., $\frac{3}{5}$, $-0.666\dots$, 0.5 , $-\frac{5}{8}$.

➤ Identify a rational number that is between two given rational numbers.

➤ Solve a given problem involving operations on rational numbers in fraction form and decimal form.

WNCP Response: Yes, some specific questions on the arithmetic operations on signed rational numbers would be beneficial. This should be an extension of the student work in grade 7 and 8 with positive rational numbers. Some explanations or examples in the student book would be fine as long as there isn't a whole review lesson or pages of review questions. You may want to put more explanation in the teacher resource.