Dividing Fractions with Negatives

Dividing Fraction Rules:

1. You don't need <u>common</u> <u>denominators</u>

2. You can't multiply mixed numbers or whole numbers

a. They must be turned into <u>improper</u> <u>fractions</u>
 3. LCR→ <u>lave</u> the first fraction, <u>change</u> division to multiplication, find the <u>recipocal</u> of the second fraction.

4. Follow all multiplication rules.

Follow integer division rules (tic-tac-toe)

Solve. Make sure your answers are in simplest form.

1.
$$\frac{1}{3} \div \frac{-4}{5} = \boxed{-\frac{5}{12}}$$

2.
$$-\frac{1}{8} \div 3\frac{1}{4} = \begin{bmatrix} -\frac{1}{20} \\ \frac{1}{8} \div \frac{13}{4} \\ \frac{1}{8} \div \frac{13}{4} \end{bmatrix} = \frac{1}{20}$$

$$3. - 2\frac{2}{5} \div - 3\frac{1}{3} = \boxed{\frac{18}{25}}$$

$$\frac{12}{5} \div \frac{10}{3}$$

$$\frac{12}{5} \div \frac{3}{3} = \frac{18}{25}$$

$$4. - 7 \div \frac{5}{8} = \boxed{-\frac{56}{5}} \text{ or } -11\frac{1}{5}$$

$$7 \div \frac{5}{8} = \frac{56}{5} \text{ or } 11\frac{1}{5}$$

$$\frac{7}{1} \cdot \frac{8}{5} = \frac{56}{5} \text{ or } 11\frac{1}{5}$$