SSR

Read silently until 9:15

Opener

1. Dave is painting a wall in his living room a bright red color. So far, he has painted 1/5 of the wall and has used 1/2 gallon of paint. How many gallons of paint does he need to cover the entire wall?

2. Jane’s oatmeal recipe requires the mixing of 3/4 cups of oats with 5/4 cups of water. How many cups of oats are needed per cup of water?

3/4 oats
5/4 water

3. An oil company started to drill on land that was 340 feet above sea level. If they drilled down 525 feet every hour, what location was the bottom of the hole after 3 hours?

340 - 3(525)

340 - 1575

340 + -1575

1575 -1235

5 5
____
1575

1/2 + 1/2 + 1/2 + 1/2 = 5/2
Learning Target

I can solve mathematical problems containing all rational numbers.
Multiplying and Dividing Signed Fractions

- Change all mixed numbers to improper fractions.
- If the problem is division, change it to multiplication and take the reciprocal of the second fraction.
- Simplify/reduce numbers that are next to each other. You can NOT reduce or cancel fractions.
- Multiply across the top, across the bottom – don’t forget integer rules!

A. \( \frac{-4}{5} \cdot \frac{3}{2} = \frac{-28}{10} = \frac{-14}{5} \)

B. \( \frac{5}{3} + \left( -\frac{2}{10} \right) \Rightarrow \frac{21}{10} \times \frac{10}{21} = \frac{210}{105} \Rightarrow \frac{52}{21} \)

C. \( -4 \frac{2}{3} \cdot \left( -\frac{3}{7} \right) \)

D. \( \frac{2}{3} \div \left( -\frac{4}{9} \right) \)

E. \( -4 \frac{1}{5} \div \frac{2}{6} \)
Multiplying Signed Decimals

- Rules have not changed! Multiply numbers as usual, count up \( \text{decimal places} \).
- Use \( \text{multiplication} \) rules to determine sign of product.

1. \(3.2 \cdot (-4.3)\)
   \[
   \begin{array}{c}
   32 \\
   \times 43 \\
   \hline
   98 \\
   \hline
   128.8
   \end{array}
   \]
   \( -13.76 \)

2. \((-4.32) \cdot (-2.7)\)
   \[
   \begin{array}{c}
   432 \\
   \times 27 \\
   \hline
   1296 \\
   \hline
   9024
   \end{array}
   \]
   \( +11.664 \)

3. \(0.12 \cdot (-3.1)\)

4. \((-0.2) \cdot (-1.4)\)

Dividing Signed Decimals

- Rules have not changed! Move decimal point in divisor to the \( \text{right} \), \( \text{tomake a whole} \).
- Divide as normal, use \( \text{multiplication} \) rules to determine sign of quotient.

1. \(25.2 \div (-0.3)\)
   \[
   \begin{array}{c}
   25.2 \\
   \div 0.3 \\
   \hline
   84
   \end{array}
   \]
   \(-84 \)

2. \(-7.29 \div (-9)\)
   \[
   \begin{array}{c}
   7.29 \\
   \div 9 \\
   \hline
   1.729
   \end{array}
   \]
   \( +0.81 \)

3. \(-2.3 \div (-0.5)\)
   \[
   \begin{array}{c}
   -23 \\
   \div 0.5 \\
   \hline
   -46
   \end{array}
   \]
   \(-46 \)

4. \(4.20 \div (-0.07)\)
   \[
   \begin{array}{c}
   420 \\
   \div 0.07 \\
   \hline
   6000
   \end{array}
   \]
   \(-6000 \)

Dec 3-10:48 AM

Dec 4-12:56 PM
Puzzle Time

When Is A Baby Like A Basketball Player?

Write the letter of each answer in the box containing the exercise number.

Multiply. Write fractions in simplest form:

1. \(-\frac{1}{3} \times \left(-\frac{2}{9}\right)\)
2. \(-\frac{3}{5} \times \left(-\frac{1}{9}\right)\)
3. \(-\frac{1}{3} \times \frac{3}{4} \times \frac{2}{3} \times \frac{3}{4}\)
4. \(-0.5 \times (-2.1)\)
5. \(-7.5 \times (-0.3)\)
6. \((-0.5)^2\)

Divide. Write fractions in simplest form.

7. \(\frac{5}{8} \div \left(-\frac{1}{4}\right)\)
8. \(-2\frac{3}{8} \div \frac{5}{8}\)

Answers:

R. \(2\frac{5}{6}\)  E. \(\frac{27}{64}\)
S. \(-3\frac{1}{2}\)  D. \(9\frac{3}{8}\)
H. \(-0.5\)  G. \(-5\frac{1}{4}\)
B. \(-3.5\)  L. \(-0.2\)
L. \(-3.5\)  W. \(\frac{3}{2}\)

Distribution

\(a(6 + c)\)

\(ab + ac\)

\(-4(3 + -4)\)

\(-4.3 + -4.4\)

\(-12 + 16\)

\(4\)

\(4(2 + 3)\)

\(4.2 + 4.3\)

\(8 + 12\)

= \(20\)

\(-3(-11 - 6)\)

\(-3\cdot-11 - -3\cdot6\)

\(33 - -18\)

\(33+18\)