Warm-Up

Evaluate the following expressions:

1) $-\dfrac{14}{7} + \dfrac{1}{5}$

$-\dfrac{70}{35} + \dfrac{7}{35} = -\dfrac{63}{35}$

$= -1\dfrac{28}{35}$

$= \boxed{-1\dfrac{4}{5}}$

2) $-12.45 + 6.24$

-6.21

4) $\left(\dfrac{-6}{11}\right)\left(\dfrac{8}{7}\right) = -\dfrac{48}{77}$

3) $\dfrac{-5}{6} - \left(\dfrac{-4}{9}\right)\left(\dfrac{1}{2}\right)$

$-\dfrac{5}{6} + \left(\dfrac{4}{9}\right) - \dfrac{1}{2}$

$-\dfrac{15}{18} + \dfrac{8}{18} - \dfrac{1}{2}$

$-\dfrac{7}{18} - \dfrac{1}{2}$

$-\dfrac{7}{18} - \dfrac{9}{18} = -\dfrac{16}{18}$

$= \boxed{-\dfrac{8}{9}}$

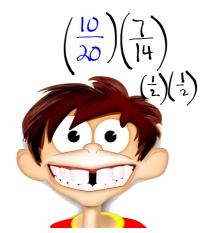---

Multiplying Rational Numbers in Fraction Form

We should always try to reduce before we start the questions so we keep our numbers small

Determine the product:

$\left(-\dfrac{11}{7}\right)\left(-\dfrac{21}{44}\right)$

First, we simplify:

$= \left(\dfrac{1}{1}\right)\left(\dfrac{3}{4}\right) = \dfrac{3}{4}$

$\left(\dfrac{10}{20}\right)\left(\dfrac{7}{14}\right)$

$\left(\dfrac{1}{2}\right)\left(\dfrac{1}{2}\right)$

Then start multiplying

So, our new expression, looks like this:

$=$

$=$

$$\left(-4\frac{2}{7}\right) \quad \left(-5\frac{2}{3}\right)$$

$$\left(-\frac{30}{7}\right)^{\times 3}\left(\frac{-17}{3}\right)$$

1) Improper
2) Can I reduce?
3) $\dfrac{Top \times Top}{Bottom \times Bottom}$
4) Simplify

$$\left(\frac{30}{7}\right)\left(\frac{17}{3}\right)$$

$$\left(\frac{10}{7}\right)\left(\frac{17}{1}\right) = \frac{170}{7}$$

$$= 24\frac{2}{7}$$

Multiplying Rational Numbers to Solve Problems

The price of a share in CIBC changed by -$1.57
on March 4th, 2008.
Linda owns 43 shares.
By how much did Linda's shares change on that
day?

$$(-1.57)(43) = -67.51$$

The change in value is represented
by this expression:
-$1.57 x 43.

Use a calculator.

-$1.57 x 35 = - $67.51

The shares lost $67.51 that day.

Practice Questions
p. 128-129

Questions

5ab, 9, 11, 12, 14, 15, 16ab

9, 14, 15, 16ab

#12 (last night)

Do not just write down answers show work.
You don't have to rewrite word problems but
for 11, 12 write out the questions (NOT JUST
THE ANSWERS)