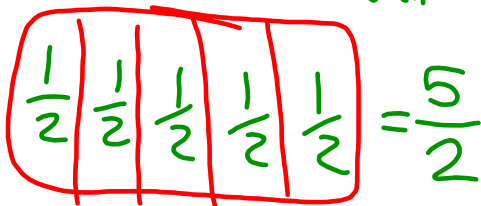# SSR

Read silently until 9:15

Dec 1-4:41 PM

Opener

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

$$\frac{1/2 \text{ gallons}}{1/5 \text{ wall}} \quad C \cdot F$$

$$\frac{1}{2} \cdot \frac{5}{1} = \frac{5}{2} \quad \text{gallons of paint per wall}$$

$$\boxed{\frac{1}{2}\,\Big|\,\frac{1}{2}\,\Big|\,\frac{1}{2}\,\Big|\,\frac{1}{2}\,\Big|\,\frac{1}{2}} = \frac{5}{2}$$

2. Jane's oatmeal recipe requires the mixing of $\frac{3}{4}$ cups of oats with $1\frac{1}{4}$ cups of water. How many cups of oats are needed per cup of water?

$$\frac{3/4 \text{ oats}}{5/4 \text{ water}}$$

$$\frac{3}{4} \cdot \frac{4}{5} = \frac{12 \to 3}{20 \to 5} \quad \text{cups of oats per cup of water}$$

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?

$$340 - 3(525)$$

$$340 - 1575$$

$$340 + {}^-1575$$

$$\boxed{{}^-1235}$$

$$\begin{array}{r} 525 \\ \times \ \ 3 \\ \hline 1575 \end{array}$$

$$\begin{array}{r} 1575 \\ -\ \ 340 \\ \hline 1235 \end{array}$$

May 23-8:37 AM

_____Key_____ DATE ___ PERIOD ___

Multiplying and Dividing HW

Divide.

1. $42 \div (-7)$ -6

2. $45 \div (-5)$ -9

3. $-9 \div 3$ -3

4. $-64 \div (-8)$ 8

5. $-39 \div (-13)$ 3

6. $-121 \div 11$ -11

7. $\frac{-48}{12}$ -4

8. $\frac{-35}{7}$ -5

9. $\frac{-38}{-2}$ 19

10. $\frac{32}{-16}$ -2

11. $\frac{55}{-5}$ -11

12. $\frac{-63}{7}$ -9

13. Divide 75 by -25.

-3

14. Find the quotient of -30 and -15.

2

ALGEBRA Evaluate each expression if $f = -15$, $g = 5$, **and** $h = -45$.

15. $-20 \div \frac{5}{8}$

-4

16. $90 \div h$ -45

-2

17. $h \div f$ $\frac{-45}{-15}$

3

18. $fg \div 25$ $\frac{-75}{}$

-3

19. $\frac{f - h}{10}$ $\frac{30}{}$

3

20. $\frac{g - 5}{-1}$

0

21. $f \div g$

3

22. $\frac{h - 3g}{f}$ $\frac{-45 - 15}{}$

4

23. $\frac{f + h}{-g}$ $\frac{-60}{-5}$

12

Dec 3-7:10 AM

<div style="background:cyan">

Learning Target

I can solve mathematical problems containing all rational numbers.

</div>

May 23-8:38 AM

Multiplying and Dividing Signed Fractions

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

A. $-\frac{4}{5} \cdot 3\frac{1}{2}$ $\quad \dfrac{-4 \to 7}{5 \to 2} = \dfrac{-28 \div 2}{10 \div 2} = \dfrac{-14}{5}$

B. $5\frac{1}{5} \div \left(-2\frac{1}{10}\right)$ $\quad \dfrac{26}{5} \div \dfrac{-21}{10} \to \dfrac{26}{5} \times \dfrac{10}{-21} = \dfrac{260}{-105} \to \dfrac{52}{-21}$

Dec 3-10:52 AM

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

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

E. $-4\frac{1}{5} \div \frac{7}{8}$

Dec 3-10:53 AM

3

Multiplying Signed Decimals

- Rules have not changed! Multiply numbers as usual, count up _decimal_ places.
- Use _integer multiplication_ rules to determine sign of product.

1. $3.2 \cdot (-4.3)$ -13.76

$$\begin{array}{r} 32 \\ \times\ 43 \\ \hline 96 \\ +128 \\ \hline 13.76 \end{array}$$

2. $(-4.32)(-2.7)$ $+11.664$

$$\begin{array}{r} 432 \\ \times\ 27 \\ \hline 3024 \\ +8640 \\ \hline 11.664 \end{array}$$

3. $0.12 \cdot (-3.1)$

4. $(-0.2)(-1.4)$

Dec 3-10:48 AM

Dividing Signed Decimals

- Rules have not changed! Move decimal point in divisor to the _right_ to make it a _whole_ number, and move the decimal point in the dividend the same amount, then place on top.
- Divide as normal, use _integer division_ rules to determine sign of quotient.

1. $25.2 \div (-0.2)$ -126

$0.2\overline{)25.2}$

$$\begin{array}{r} 126. \\ 2\overline{)252} \\ -2\downarrow \\ \hline 05 \\ -4\downarrow \\ \hline 12 \\ -12 \\ \hline 0 \end{array}$$

2. $-7.29 \div (-9)$ $+.81$

$$\begin{array}{r} +0.81 \\ 9\overline{)7.29} \\ -72\downarrow \\ \hline 09 \\ -9 \\ \hline 0 \end{array}$$

3. $-1.15 \div 0.5$ $\boxed{-2.3}$

$0.5\overline{)1.15}$

$$\begin{array}{r} 02.3 \\ 5\overline{)115} \\ -10\downarrow \\ \hline 15 \\ -15 \\ \hline 00 \end{array}$$

4. $4.20 \div (-0.07)$ $\boxed{-60}$

$0.07\overline{)4.20}$

$$\begin{array}{r} 060. \\ 7\overline{)420} \\ -42\downarrow \\ \hline 00 \end{array}$$

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. $-\frac{4}{5} \cdot \left(-\frac{5}{7}\right)$

2. $2\frac{2}{3} \cdot \left(-4\frac{1}{4}\right)$

3. $\left(-\frac{3}{4}\right)^3$ $-\frac{3}{4} \cdot -\frac{3}{4} \cdot -\frac{3}{4}$

4. $0.8 \times (-2.1)$

5. $-7.5 \times (-0.3)$

6. $(-0.8)^3$

Divide. Write fractions in simplest form.

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

8. $-1\frac{1}{6} \div \frac{2}{9}$

Answers

R. 2.25

S. $-2\frac{1}{2}$

H. -0.512

B. 3.35

L. -4.5

E. $-\frac{27}{64}$

D. $91\frac{3}{8}$

E. $-5\frac{1}{4}$

I. -0.2

W. 1.9

Dec 4-12:56 PM

Distribution

$a(b + c)$

$ab + ac$

$-4(3 + -4)$

$-4\cdot 3 + -4\cdot 4$

$-12 + 16$

4

$4(2 + 3)$

$4\cdot 2 + 4\cdot 3$

$8 + 12$

$= 20$

$-3(-11 - 6)$

$-3\cdot -11 - -3\cdot 6$

$33 - {}^-18$

$33 + 18$

Dec 4-1:03 PM