

You try:
Multiply the rational numbers.

1) $\frac{1}{7} \times \frac{3}{5}$

$\frac{3}{35}$

2) $\frac{-3}{2} \times \frac{-4}{10}$

OR
 $\frac{-3}{2} \times \frac{-2}{10}$
 $\frac{12}{20} \text{ simplify}$
 $\frac{6}{10} \text{ divide}$
 $\frac{3}{5}$

3) $-3\frac{1}{2} \times 2\frac{1}{3}$

$\frac{7}{2} \times \frac{7}{3}$ mixed #
 $\frac{-49}{14} = -8\frac{1}{6}$
 Simplify

4) $-2\frac{2}{3} \cdot 4\frac{1}{10}$

$\frac{-8}{3} \cdot \frac{41}{10}$
 $\frac{-328}{30} = -10\frac{28}{30}$
 $-10\frac{14}{15}$

5) $\frac{3}{2} \left(-\frac{2}{9} \right)$

$\frac{3}{2} \cdot -\frac{2}{9}$
 $-\frac{10}{18} = -\frac{5}{9}$

6) $\frac{1}{15} \times \left(-\frac{25}{6} \right)^5$

5 multiply across
 $\frac{5}{9}$

Directions: Show work on page 21

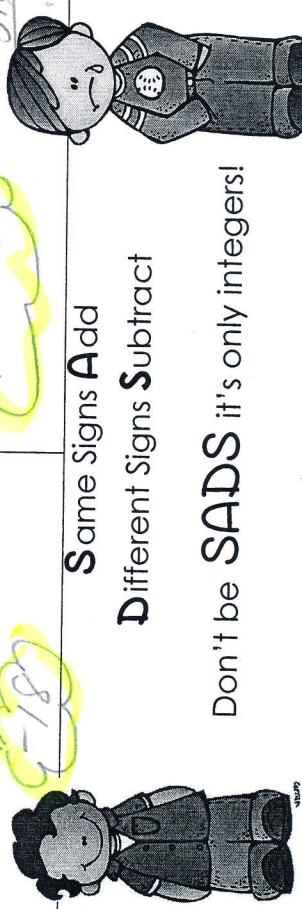
Homework

1. $-\frac{3}{4} \cdot \left(-\frac{10}{9} \right)$	$= \frac{5}{6}$	2. $-15 \cdot \left(-\frac{3}{5} \right) = 9$
3. $2\frac{1}{3} \cdot \left(-2\frac{1}{7} \right) = -5$		4. $1\frac{2}{3} \left(-2\frac{9}{10} \right) = -2\frac{5}{2}$
5. $-3\frac{1}{5} \times 2\frac{3}{2} = -11\frac{1}{5}$		6. $-\frac{3}{14} \cdot \frac{21}{12} = -\frac{1}{4}$
7. Kevin is trying to save \$60 by the end of this month. So far, he has saved $\frac{5}{6}$ of this amount. How much has he saved? $\$50$		
8. Abbey uses $3\frac{1}{5}$ cups of milk to make pancakes. She then uses $1\frac{4}{7}$ cups of milk to bake cookies. What is the total amount of milk she used? $4\frac{23}{35}$ cups		
9. $-16 + (-8 + 2)$	$-16 + (-6)$ $-16 - 6$ -22	10. $-16.8 + 12.4$ -16.8 -12.4 -4.4
11. $-(6^2) \div 4 - 9$	$-36 \div 4 - 9$ $-9 - 9$ -18	12. $14.12 - (75.6)$ $14.12 + 5.6$ 14.12 5.6 37.72

Same Signs Add

Different Signs Subtract

Don't be **SADS** it's only integers!



HW multiplying rational #s

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$$1.) \frac{-3}{4} \cdot \frac{(-10)}{8}$$

~~Cross cancellation~~

$\frac{5}{4}$ answer

$$2.) \frac{-15}{1} \cdot \frac{(-3)}{5}$$

mult. across

$$\frac{9}{1} = 9$$

$$3.) 2\frac{1}{3} \cdot (-2\frac{1}{7})$$

$$\frac{7}{3} \cdot \left(-\frac{15}{7}\right)$$

answer

$$-5$$

$$5.) -3\frac{1}{5} \cdot 2\frac{3}{2}$$

$$\frac{-16}{5} \cdot \frac{7}{2}$$

answer

$$\frac{-56}{5} = -11\frac{1}{5}$$

$$6.) -\frac{3}{4} \cdot \frac{21}{18}$$

$$\frac{-21}{16} = -1\frac{15}{16}$$

$$7.) \frac{5}{8} \left(\frac{10}{1}\right)$$

$$8.) 3\frac{1}{5} + 1\frac{4}{7}$$

$$\frac{16}{5} + \frac{11(5)}{35}$$

LCM = 35

$$4.) 1\frac{2}{3} \cdot (-2\frac{9}{10})$$

$$\frac{5}{6} \left(\frac{-29}{10}\right)$$

mixed #

$$\frac{-29}{12} = -2\frac{5}{12}$$

answer

$$\frac{112}{35} + \frac{55}{35}$$

$$\frac{167}{35}$$

improper

$$\frac{4}{35} \left(\frac{27}{14}\right)$$

$$\frac{14}{35} \times \frac{7}{112}$$

$$\frac{112}{167} + \frac{55}{167}$$

#9-12 on worksheet

$$\begin{array}{r} 4 \\ 35) 167 \\ -140 \\ \hline 27 \end{array}$$