

# CH 2 Review pgs. 71-73 (1-11 odd; 12-18 all; 20-26 even)

## Key

①  $-0.5\bar{3}$

③  $-2.1\bar{6}$

⑤  $-\frac{3}{5}$

⑦  $-5\frac{4}{5}$

⑨  $\frac{1}{10}$

⑪  $-4$

⑫  $-\frac{43}{60}$

⑬  $2\frac{7}{8}$

⑭  $11.25$

⑮  $-11\frac{5}{12}$  in.

⑯  $-\frac{3}{4}$

⑰  $-1\frac{3}{11}$

⑱  $-2$

⑳  $\frac{28}{81}$

㉒  $57.23$

㉔  $5$

㉖  $-75$  ft

## Solutions

①  $-\frac{8}{15} = -0.5\bar{3}$

$$\begin{array}{r} -0.53 \\ 15 \overline{) 8.00} \\ \underline{-75} \phantom{0} \\ 50 \\ \underline{-45} \\ 50 \\ \underline{-45} \\ 5 \end{array}$$

Repeat  $\rightarrow$  ⑤

③  $-\frac{13}{6} = -2.1\bar{6}$

$$\begin{array}{r} -2.16 \\ 6 \overline{) 13.00} \\ \underline{-12} \phantom{00} \\ 10 \phantom{0} \\ \underline{-6} \phantom{0} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

Repeating  $\rightarrow$  ④

⑤  $-0.6 = -\frac{3}{5}$

$$-\frac{6}{10} \div \frac{2}{2} = -\frac{3}{5}$$

⑦  $-5.8 = -5\frac{4}{5}$

$$-5\frac{8}{10} = -5\frac{4}{5}$$

⑨  $\frac{9}{10} + (-\frac{4}{5}) = +\frac{1}{10}$

opposite directions

$\uparrow$   $\downarrow$  SUBTRACT

$$\begin{array}{r} \frac{9}{10} \\ -\frac{4}{5} \cdot \frac{2}{2} = -\frac{8}{10} \\ \hline +\frac{1}{10} \end{array}$$

⑪  $-1.6 + (-2.4) = -4$

SAME DIRECTION

$\downarrow$   $\downarrow$  ADD

$$\begin{array}{r} 1.6 \\ +2.4 \\ \hline -4.0 \end{array}$$

⑫  $-\frac{5}{12} - \frac{3}{10} = -\frac{43}{60}$

$\downarrow$   $\downarrow$  ADD same direction

$$\begin{array}{r} -\frac{5}{12} \cdot \frac{5}{5} = -\frac{25}{60} \\ -\frac{3}{10} \cdot \frac{6}{6} = -\frac{18}{60} \\ \hline -\frac{43}{60} \end{array}$$

26  $\frac{5}{8}$  of  $-120$   
 $\frac{5}{8} \times \frac{-120}{1} \rightarrow \frac{5}{1} \left( \frac{-15}{1} \right) = -75 \text{ ft}$

17  $-\frac{4}{11} \div \frac{2}{7} = -\frac{3}{11}$

13  $3\frac{3}{4} - \frac{7}{8} = 2\frac{7}{8}$   
 SUBTRACT BORROW  
 $3\frac{3}{4} \cdot \frac{2}{2} = \frac{6}{8} + \frac{8}{8} = 2\frac{14}{8}$   
 $-\frac{7}{8} \rightarrow \frac{7}{8}$   
 $\underline{\hspace{1cm}}$   
 $2\frac{7}{8}$

Keep Change Flip  
 $-\frac{4}{11} \times \frac{7}{2} = -\frac{14}{11} = -\frac{3}{11}$   
 Simplify B4 you multiply  
 $-\frac{2}{11} \times \frac{7}{1} = -\frac{14}{11} = -\frac{3}{11}$

14  $3.8 - (-7.45) = +11.25$   
 ADD  
 $\begin{array}{r} 3.80 \\ + 7.45 \\ \hline 11.25 \end{array}$

18  $+6.4 \div (-3.2) = -2$   
 $\begin{array}{r} -2 \\ 3.2 \overline{) 6.4} \\ \underline{6.4} \\ 0 \end{array}$

15  $32\frac{1}{4} \cdot \frac{3}{3} = 3\frac{12}{12} + \frac{15}{12} = 3\frac{15}{12}$   
 $-20\frac{5}{6} \cdot \frac{2}{2} = -20\frac{10}{12}$   
 $\underline{\hspace{1cm}}$   
 $11\frac{5}{12}$   
 Asked for CHANGE NOT distance.  
 Since the turtle went deeper, the change is NEGATIVE

20  $-\frac{4}{9} \left( -\frac{7}{9} \right) = +\frac{28}{81}$   
 can't simplify

20  $\frac{5}{6}$  in  
 32  $\frac{1}{4}$   
 SUBTRACT ABSOLUTE VALUES - SAME SIDE OF ZERO

22  $-5.9(-9.7) = +57.23$   
 $\begin{array}{r} 9.7 \leftarrow \div 10 \\ \times 5.9 \leftarrow \div 10 \\ \hline 873 \\ 4850 \\ \hline 57.23 \leftarrow \div 100 \end{array}$

16  $\frac{9}{10} \div \left( -\frac{6}{5} \right)$   
 $\frac{9}{10} \times \left( -\frac{5}{6} \right)$   
 Simplify B4 multiply  
 $\frac{3}{2} \times \left( -\frac{1}{2} \right) = -\frac{3}{4}$

24  $-\frac{2}{3} \left( 2\frac{1}{2} \right) (-3) =$   
 $-\frac{2}{3} \left( \frac{5}{2} \right) \left( -\frac{3}{1} \right) = +$   
 $-\frac{1}{1} \left( \frac{5}{1} \right) \left( -\frac{1}{1} \right) = +5$

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