

# Warmup

- ① Forrester drives 90 miles an hour. It takes her 1.5 hours to get to work. Her car gets 30 miles per gallon. The cost of gas is \$2.50. How much does she spend on her way to work?

$$\frac{90 \text{ miles}}{1 \text{ hr}} \cdot \frac{1.5 \text{ hr}}{1 \text{ work}} \cdot \frac{1 \text{ gal}}{30 \text{ miles}} \cdot \frac{\$2.50}{1 \text{ gal}}$$

$$\boxed{\$11.25}$$

## ② Simplify

$$4\sqrt{8} - \sqrt{3} + 6\sqrt{3} - 6\sqrt{2}$$

$\begin{array}{c} \uparrow \\ 2 \end{array}$   $\begin{array}{c} \uparrow \\ 2 \end{array}$

$$\begin{array}{c} 2 \\ \hline 22 \end{array}$$

$$4 \cdot 2\sqrt{2} - \sqrt{3} + 6\sqrt{3} - 6\sqrt{2}$$
$$8\sqrt{2} + 5\sqrt{3} - 6\sqrt{2}$$
$$\boxed{2\sqrt{2} + 5\sqrt{3}}$$

# Rational and Irrational Number Sort

Directions: Sort the numbers and words into 2 groups - rational or irrational. Write the answers in the appropriate group.

<ul style="list-style-type: none"> <li>• Whole Numbers</li> <li>• Non-Perfect Square Roots</li> <li>• Integers</li> <li>• Non-Repeating Decimals</li> <li>• <math>\pi</math></li> <li>• <math>\sqrt{121}</math></li> <li>• 2.389746...</li> <li>• 3.77</li> <li>• <math>-\sqrt{400}</math></li> </ul>	<ul style="list-style-type: none"> <li>• Non-Terminating Decimals</li> <li>• Terminating Decimals</li> <li>• Perfect Square Roots</li> <li>• Repeating Decimals</li> <li>• <math>\sqrt{32}</math></li> <li>• 0</li> <li>• -17</li> <li>• 2.75</li> <li>• <math>6\frac{1}{2}</math></li> </ul>
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Rational (pretty)

whole #'s  
 Integers  
 Perfect  $\sqrt{121} = 11$   
 $\sqrt{-17}$   
 Terminating decimals  
 Repeating decimals  
 $3.77$   
 $6\frac{1}{2}$   
 $2.75$   
 $-\sqrt{400} = -20$

Irrational (ugly)

non perfect  $\sqrt{\quad}$   
 non repeating decimals  
 non-terminating decimals  
 $\pi$   
 $\sqrt{32}$   
 2.389746...