

Warmup

Forrester is racing Cain and driving at a rate of 95 miles an hour. It takes them 1 hour and 30 minutes to get to their destination (ice cream shop duh). The car gets 55 miles per gallon and gas costs \$2.30. How many meters do they drive? How much does it cost them to drive?

1 meter = 3.3 ft

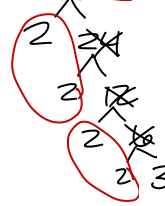
$$\frac{95 \text{ miles}}{1 \text{ hr}} \cdot \frac{1.5 \text{ hr}}{1 \text{ shop}} \cdot \frac{1 \text{ gal}}{55 \text{ miles}}$$

$$\frac{95 \text{ miles}}{1 \text{ hr}} \cdot \frac{1.5 \text{ hr}}{1 \text{ shop}} \cdot \frac{5280 \text{ ft}}{1 \text{ mile}} \cdot \frac{1 \text{ m}}{3.3 \text{ ft}}$$

228,000m to shop

② Simplify

$$4x^2 \sqrt{4x} - 2x \sqrt{x^3}$$



$$2 \cdot 2 \cdot x \cdot x \sqrt{3x}$$

$$4 \cdot 2 \cdot x^2 \sqrt{3x}$$

$$-4x^2 \sqrt{3x} + 16x^2 \sqrt{3x}$$

$$12x^2 \sqrt{3x}$$

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

(pretty)

Whole #'s

terminating decimals

Perfect Integers

$$\sqrt{121} = 11 \quad 2.75$$

Repeat Decimals

3.77

$$-\sqrt{400} = -20 \quad 6\frac{1}{2}$$

-17

Irrational

(ugly)

non perfect

non-repeating decimals

non-terminating decimals

2.389746...

$$\sqrt{32}$$