

p.6  
Unit 5

**Classify sums:**

Rational + Rational = Rat.  
 $\sqrt{16} + \sqrt{4} = 6$        $1.\bar{3} + \sqrt{25} = 6.\bar{3}$

Irrational + Irrational = IRR

$\sqrt{10} + \sqrt{3} \approx 4.89\dots\dots$

Rational + Irrational = Irr

$\sqrt{25} + \sqrt{2} \approx 6\dots\dots\dots$

USE CALCULATOR

**Classify Products:**

Rational \* Rational = Rat

$\sqrt{9} \cdot \sqrt{4} = 6$

Irrational \* Irrational = IRR or R

$\sqrt{3} \cdot \sqrt{10} \approx$  IRR

$\sqrt{10} \cdot \sqrt{10} = 10$  RAT

USE CALCULATOR

Rational \* Irrational = IRR

$\sqrt{9} \cdot \sqrt{3} =$  IRR

Does not equal 0.



**You try:** Simplify and classify each expression as r

1.  $2(\frac{1}{5})$

(R)

2.  $\sqrt{6} \cdot \sqrt{3}$

3.  $\sqrt{3} \cdot \sqrt{12}$

$\sqrt{36} = 6$  (R)

4.  $5(\sqrt{2})$

5.  $\sqrt{7} + \sqrt{7}$

6.  $5 + \sqrt{12}$