Name: _____   Date: _____

**Aim:** I can describe the sum and product of rational and irrational numbers.

**Do Now:** Use your calculator to determine if the following are rational or irrational.

1. $\sqrt{2} \cdot \sqrt{5}$

2. $(\sqrt{2} + 3)(\sqrt{2} - 3)$

**Directions:** Use these values to complete level 1 and Level 2 below:

$$A = 0$$
$$B = \sqrt{5}$$
$$C = 10$$

$$D = \sqrt{16}$$
$$E = 16$$
$$F = \sqrt{20}$$

**Level 1:** Identify whether each of the following are rational or irrational.

A: _____   B: _____

C: _____   D: _____

E: _____   F: _____

**Level 2:** Identify whether each of the following are rational or irrational.

$D + E$: _____   $B \cdot C$: _____

$A + B$ _____   $B \cdot F$: _____

$C + E$: _____   $C \cdot D$: _____

$B + F$: _____   $A \cdot C$: _____