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:

$$A = 0 \qquad\qquad D = \sqrt{16}$$
$$B = \sqrt{5} \qquad\qquad E = 16$$
$$C = 10 \qquad\qquad F = \sqrt{20}$$

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.

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

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

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

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