

Name _____

Date _____

Area of Triangle Using Trigonometry - Guided Lesson Explanation

Explanation#1

$$A = \frac{1}{2} ab \sin P$$

$$A = \frac{1}{2} \times 27 \times 18 \times \sin 57^\circ$$

$$A = 243(0.8387)$$

$$A = 203.8$$

So the answer is 203.8

Explanation#2

$$A = \frac{1}{2} ab \sin X$$

$$A = \frac{1}{2} \times 22 \times 22 \times \sin 48^\circ$$

$$A = 484(0.7431)$$

$$A = 359.7$$

So the answer is 359.7

Explanation#3

$$A = \frac{1}{2} ab \sin E$$

$$A = \frac{1}{2} \times 16 \times 6 \times \sin 67^\circ$$

$$A = 48(0.9205)$$

$$A = 44.2$$

So the answer is 44.2

