

Name \_\_\_\_\_

Date \_\_\_\_\_

**Special Right Triangles (Trigonometry emphasis)- Guided Lesson**  
**Explanation:**

**Explanation#1**

As we know the value of:

$$\sin 0^\circ = 0; \sin 60^\circ = \sqrt{3}/2; \tan 45^\circ = 1$$

$$\sin 0^\circ + \sin 60^\circ - \tan 45^\circ = 0 + \sqrt{3}/2 - 1$$

$$\sin 0^\circ + \sin 60^\circ - \tan 45^\circ = -1.92$$

So, the answer is  $\sin 0^\circ + \sin 60^\circ - \tan 45^\circ = -1.92$ .

**Explanation#2**

As we know the value of:

$$\cot 30^\circ = \sqrt{3}; \sec 60^\circ = 2; \operatorname{cosec} 30^\circ = 2$$

$$\cot 30^\circ + \sec 60^\circ + \operatorname{cosec} 30^\circ = \sqrt{3} + 2 + 2$$

$$\cot 30^\circ + \sec 60^\circ + \operatorname{cosec} 30^\circ = 5.73$$

So, the answer is  $\cot 30^\circ + \sec 60^\circ + \operatorname{cosec} 30^\circ = 5.73$ .

**Explanation#3**

$$\tan 60^\circ = \sqrt{3}; \sec 0^\circ = 1; \sin 30^\circ = 1/2$$

$$\tan 60^\circ - \sec 0^\circ + \sin 30^\circ = \sqrt{3} - 1 + 1/2$$

$$\tan 60^\circ - \sec 0^\circ + \sin 30^\circ = 1.23$$

So, the answer is  $\tan 60^\circ - \sec 0^\circ + \sin 30^\circ = 1.23$ .

