

Activity 1: find trigonometric functions

Check

Find the exact values of the six trigonometric functions for angle θ .

$$\sin \theta = \text{---}$$

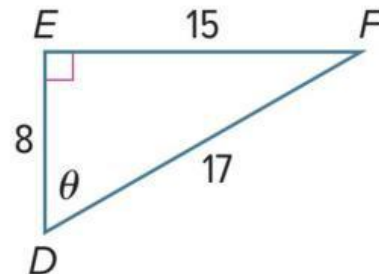
$$\cos \theta = \text{---}$$

$$\tan \theta = \text{---}$$

$$\csc \theta = \text{---}$$

$$\sec \theta = \text{---}$$

$$\cot \theta = \text{---}$$



sine: $\sin \theta = \frac{\text{opp}}{\text{hyp}}$

cosecant: $\csc \theta = \frac{\text{hyp}}{\text{opp}}$

cosine: $\cos \theta = \frac{\text{adj}}{\text{hyp}}$

secant: $\sec \theta = \frac{\text{hyp}}{\text{adj}}$

tangent: $\tan \theta = \frac{\text{opp}}{\text{adj}}$

cotangent: $\cot \theta = \frac{\text{adj}}{\text{opp}}$

Activity 2: find trigonometric ratios

Check

If $\sec B = \frac{11}{3}$, find the exact values of the five remaining trigonometric functions for B .

Step 1 Use the given information to draw a right triangle. Label the sides and vertices.

Step 2 Use the Pythagorean Theorem to find b

$$b =$$

$$b = \text{---} \quad \text{or} \quad \text{---}$$

$$\sin B = \text{---}, \cos B = \text{---}, \tan B = \text{---}, \csc B = \text{---}, \cot B = \text{---}$$

$$\text{or } \text{---} \quad \text{or } \text{---}$$

