

1-18 odds only

$$1. \sin \theta = \frac{8\sqrt{2}}{18} = \frac{4\sqrt{2}}{9}$$

$$\csc \theta = \frac{9}{4\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{9\sqrt{2}}{8}$$

$$\cos \theta = \frac{14}{8} = \frac{7}{4}$$

$$\sec \theta = \frac{4}{7}$$

$$\tan \theta = \frac{8\sqrt{2}}{14} = \frac{4\sqrt{2}}{7}$$

$$\cot \theta = \frac{7}{4\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{7\sqrt{2}}{8}$$

$$3. \sin \theta = \frac{9}{\sqrt{97}} \cdot \frac{\sqrt{97}}{\sqrt{97}} = \frac{9\sqrt{97}}{97}$$

$$\csc \theta = \frac{\sqrt{97}}{9}$$

$$\cos \theta = \frac{4}{\sqrt{97}} = \frac{4\sqrt{97}}{97}$$

$$\sec \theta = \frac{\sqrt{97}}{4}$$

$$\tan \theta = \frac{9}{4}$$

$$\cot \theta = \frac{4}{9}$$

$$5. \sin \theta = \frac{\sqrt{165}}{29}$$

$$\csc \theta = \frac{29}{\sqrt{165}} = \frac{29\sqrt{165}}{165}$$

$$\cos \theta = \frac{26}{29}$$

$$\sec \theta = \frac{29}{26}$$

$$\tan \theta = \frac{\sqrt{165}}{26}$$

$$\cot \theta = \frac{26}{\sqrt{165}} = \frac{26\sqrt{165}}{165}$$

$$7. a^2 + 6^2 = 10^2$$

$$\sin \theta = \frac{6}{10} = \frac{3}{5}$$

$$\csc \theta = \frac{5}{3}$$

$$a^2 = 100 - 36$$

$$a^2 = 64$$

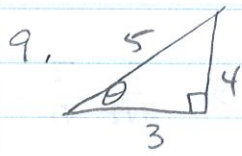
$$\cos \theta = \frac{8}{10} = \frac{4}{5}$$

$$\sec \theta = \frac{5}{4}$$

$$a = 8$$

$$\tan \theta = \frac{6}{8} = \frac{3}{4}$$

$$\cot \theta = \frac{4}{3}$$



$$a^2 + b^2 = c^2$$

$$a^2 = 5^2 - 4^2$$

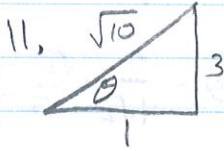
$$a^2 = 25 - 16$$

$$a^2 = 9$$

$$\sin \theta = 4/5 \quad \csc \theta = 5/4$$

$$\cos \theta = 3/5 \quad \sec \theta = 5/3$$

$$\tan \theta = 4/3 \quad \cot \theta = 3/4$$



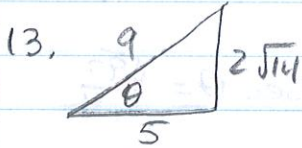
$$c^2 = 1^2 + 3^2$$

$$c^2 = 10$$

$$\sin \theta = \frac{3}{\sqrt{10}} = \frac{3\sqrt{10}}{10} \quad \csc \theta = \frac{\sqrt{10}}{3}$$

$$\cos \theta = \frac{1}{\sqrt{10}} = \frac{\sqrt{10}}{10} \quad \sec \theta = \sqrt{10}$$

$$\tan \theta = 3 \quad \cot \theta = 1/3$$



$$b^2 = 9^2 - 5^2$$

$$b^2 = 81 - 25$$

$$b^2 = 56$$

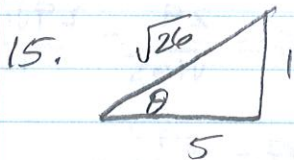
$$b = \sqrt{56} = 2\sqrt{14}$$

$$\sin \theta = \frac{2\sqrt{14}}{9} \quad \csc \theta = \frac{9}{2\sqrt{14}}$$

$$\cos \theta = 5/9 \quad \sec \theta = \frac{9\sqrt{14}}{28}$$

$$\tan \theta = \frac{2\sqrt{14}}{5} \quad \cot \theta = 5/2\sqrt{14}$$

$$\cot \theta = \frac{5}{2\sqrt{14}} = \frac{5\sqrt{14}}{28}$$



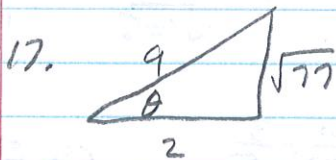
$$c^2 = 1^2 + 5^2$$

$$c^2 = 26$$

$$\sin \theta = \frac{1}{\sqrt{26}} = \frac{\sqrt{26}}{26} \quad \csc \theta = \sqrt{26}$$

$$\cos \theta = 5/\sqrt{26} = \frac{5\sqrt{26}}{26} \quad \sec \theta = \frac{\sqrt{26}}{5}$$

$$\tan \theta = 1/5 \quad \cot \theta = 5$$



$$b^2 = 9^2 - 2^2$$

$$b^2 = 81 - 4$$

$$b^2 = 77$$

$$\sin \theta = \frac{\sqrt{77}}{9} \quad \csc \theta = \frac{9\sqrt{77}}{77}$$

$$\cos \theta = 2/9 \quad \sec \theta = 9/2$$

$$\tan \theta = \frac{\sqrt{77}}{2} \quad \cot \theta = \frac{2\sqrt{77}}{77}$$