Name _____   Date _____
Mr. Schlansky   Geometry
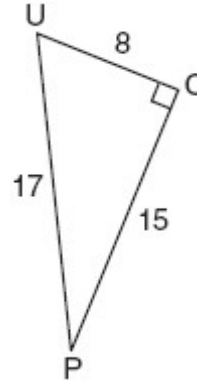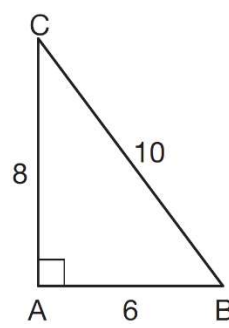
Trigonometric Ratios

1. The diagram below shows right triangle *UPC*.

Which ratio represents the sine of $\angle U$?

1) $\dfrac{15}{8}$ 3) $\dfrac{8}{15}$

2) $\dfrac{15}{17}$ 4) $\dfrac{8}{17}$

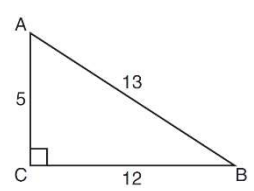2. In $\triangle ABC$ below, the measure of $\angle A = 90°$, $AB = 6$, $AC = 8$, and $BC = 10$.

Which ratio represents the sine of $\angle B$?

1) $\dfrac{10}{8}$

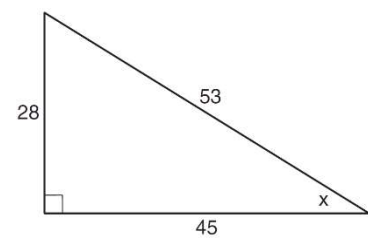2) $\dfrac{8}{6}$

3) $\dfrac{6}{10}$

4) $\dfrac{8}{10}$

3. Which ratio represents the tangent of $\angle ABC$?

1) $\dfrac{5}{13}$

2) $\dfrac{5}{12}$

3) $\dfrac{12}{13}$

4) $\dfrac{12}{5}$

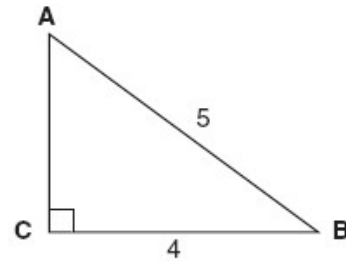4. Which ratio represents $\sin x$ in the right triangle shown below?

1) $\dfrac{28}{53}$ 3) $\dfrac{45}{53}$

2) $\dfrac{28}{45}$ 4) $\dfrac{53}{28}$

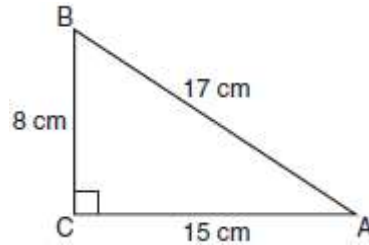5. Which equation could be used to find the measure of one acute angle in the right triangle shown below?

1) $\sin A = \dfrac{4}{5}$

2) $\tan A = \dfrac{5}{4}$

3) $\cos B = \dfrac{5}{4}$

4) $\tan B = \dfrac{4}{5}$

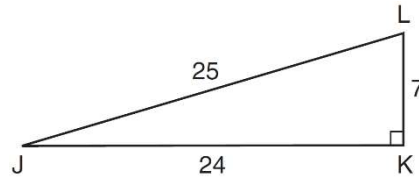6. Which equation shows a correct trigonometric ratio for angle A in the right triangle below?

1) $\sin A = \dfrac{15}{17}$

2) $\tan A = \dfrac{8}{17}$

3) $\cos A = \dfrac{15}{17}$

4) $\tan A = \dfrac{5}{8}$

7. In right triangle JKL in the diagram below, $KL = 7$, $JK = 24$, $JL = 25$, and $\angle K = 90°$.

Which statement is *not* true?

1) $\tan L = \dfrac{24}{7}$

2) $\cos L = \dfrac{24}{25}$

3) $\tan J = \dfrac{7}{24}$

4) $\sin J = \dfrac{7}{25}$

8. In right triangle ABC shown below, $AC = 12$, $BC = 16$, and $AB = 20$.

Which equation is *not* correct?

1) $\cos A = \dfrac{12}{20}$

2) $\tan A = \dfrac{16}{12}$

3) $\sin B = \dfrac{12}{20}$

4) $\tan B = \dfrac{16}{20}$