p. 451) 9, 10, 12-14, 18, 20, 21

⑨ $\sin x$ ⑩ 1 ⑫ $\cos u$ ⑬ $\tan^2 x$

⑭ $\sin \theta$ ⑱ 1 ⑳ 1 ㉑ 1

⑬ $\dfrac{1 + \tan^2 x}{\csc^2 x} = \dfrac{\sec^2 x}{\csc^2 x} = \dfrac{\frac{1}{\cos^2 x}}{\frac{1}{\sin^2 x}} = \dfrac{1}{\cos^2 x} \div \dfrac{1}{\sin^2 x}$

$= \dfrac{1}{\cos^2 x} \cdot \dfrac{\sin^2 x}{1}$

$= \dfrac{\sin^2 x}{\cos^2 x} = \boxed{\tan^2 x}$

㉑ $\sin^2(-x) + \cos^2(-x)$

$\sin(-x)\sin(-x) + \cos(-x)\cos(-x)$

$-\sin x \cdot -\sin x \ + \ \cos x \cdot \cos x$

$\sin^2 x + \cos^2 x = \boxed{1}$

⑭ $\dfrac{1 - \cos^2 \theta}{\sin \theta} = \dfrac{\sin^2 \theta}{\sin \theta} = \boxed{\sin \theta}$

$\sin^2 x + \cos^2 x = 1$

$\dfrac{-\cos^2 x \qquad -\cos^2 x}{\sin^2 x = 1 - \cos^2 x}$