

What's the Score?



- If you have any difficulty with these solutions, please contact your teacher before continuing.

$$1. \quad a. \quad \frac{3}{5xy^2z} \times \frac{15x^3z}{2}$$

$$= \frac{45x^3z}{10xy^2z}$$

$$= \frac{5xz(9x^2)}{5xz(2y^2)}$$

$$= \frac{\cancel{5xz}(9x^2)}{\cancel{5xz}(2y^2)}$$

$$= \frac{9x^2}{2y^2}, \quad x \neq 0, y \neq 0, z \neq 0$$

$$b. \quad \frac{7y-1}{2-14y} \cdot 10$$

$$= \frac{7y-1}{2-14y} \cdot \frac{10}{1}$$

$$= \frac{10(7y-1)}{2-14y}$$

$$= \frac{10(7y-1)}{2(1-7y)}$$

$$= \frac{5\cancel{10}(\cancel{7y}-1)^{-1}}{1\cancel{2}(1-\cancel{7y})}$$

$$= \frac{(5)(-1)}{1}$$

$$= -5, \quad y \neq \frac{1}{7}$$