pg.446 odd Solutions

1) $5^{-1}(3^{-2}) = \frac{1}{5^1} \cdot \frac{1}{3^2} = \frac{1}{5} \cdot \frac{1}{9} = \boxed{\frac{1}{45}}$

3) $3x^{-4} = \boxed{\frac{3}{x^4}}$

5) $3^0 s^{-2} t^2 = 1 \cdot \frac{1}{s^2} \cdot t^2 = \boxed{\frac{t^2}{s^2}}$

7) $a^2 b^0 (a^{-3}) = 1 \cdot a^{-1} = \boxed{\frac{1}{a}}$

9) $b^{\frac{1}{2}} \cdot b^{\frac{1}{2}} = b^{(\frac{1}{2}+\frac{1}{2})} = b^{\frac{2}{2}} = b^1 = \boxed{b}$

11) $(x^{\frac{1}{4}} y^{\frac{3}{4}})^4 = x^{(\frac{1}{4} \cdot 4)} y^{(\frac{3}{4} \cdot 4)} = \boxed{xy^3}$

13) $(a^3)^4 = a^{3 \cdot 4} = \boxed{a^{12}}$

15) $(xy^3z^5)^2 = \boxed{x^2 y^6 z^{10}}$

17) $\frac{a^4}{a^6} = a^{(4-6)} = a^{-2} = \boxed{\frac{1}{a^2}}$

19) $\frac{-25a^{\frac{3}{4}}b^6}{5a^{\frac{1}{2}}b^4} = \frac{-25}{5} \cdot \frac{a^{\frac{3}{4}}}{a^{\frac{1}{2}}} \cdot \frac{b^6}{b^4} = \boxed{-5a^{\frac{1}{4}}b^2}$