

Practicing with exponents: answers

(1)

$$\frac{6^n}{7^{n+4}} = \frac{6^n}{7^4 \cdot 7^n} = \frac{1}{7^4} \left(\frac{6}{7}\right)^n$$

(2)

$$\frac{3^{n+2}}{7^n} = \frac{9 \cdot 3^n}{7^n} = 9 \cdot \left(\frac{3}{7}\right)^n$$

(3)

$$\frac{2^{n+2}}{5^{n+1}} = \frac{4 \cdot 2^n}{5 \cdot 5^n} = \frac{4}{5} \left(\frac{2}{5}\right)^n$$

(4)

$$3^{-n} 2^n = \frac{2^n}{3^n} = \left(\frac{2}{3}\right)^n$$

(5)

$$6^2 4^{-n-1} = \frac{36}{4 \cdot 4^n} = 9 \left(\frac{1}{4}\right)^n$$