Essential Skills 24

The questions in this series of worksheets appear frequently.

These are the GIFTS you must take to succeed

Indices (Non Calculator)

Simplify, leaving your answers with positive indices:

1.
$$\frac{x^5 \times x^6}{x^3}$$
 2. $\frac{x^7 \times x^{-4}}{x^2}$

- 3. $\frac{3x^2 \times x^4}{x^{-5}}$ 4. $\frac{5x^3 \times 4x^2}{2x^3}$
- 5. $\frac{8x^5 \times 3x}{12x^2}$ 6. $\frac{3x^2 \times 2x^{-1}}{7x}$
- 7. $\frac{2x^3 \times 5x}{15x^{-6}}$ 8. $\frac{x^8 \times 3x^{-6}}{x^5}$

9.
$$\frac{2x^2y^3 \times 6x^2y}{4xy^2}$$
 10. $\frac{3x^2y^{\frac{1}{3}} \times 6x^{-1}y^{\frac{8}{3}}}{9x^3y^2}$



APPLYING QUESTION

(a) Simplify,
$$\frac{x^5y^3 \times 2x^{-1}y}{3x^2y^5},$$

leaving your answer with positive indices.

(b) Hence, evaluate
$$\frac{x^5y^3 \times 2x^{-1}y}{3x^2y^5}$$
, when $x = -3$ and $y = 2$.



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