正の数と負の数 [乗法と除法の混じった計算]

＜演習問題＞
次の計算をせよ。

(1)　$(+8) \times (-2) \div (+4)$

(2)　$(+4) \times (-6) \div (-12)$

(3)　$(-6) \times (-2) \div (+3)$

(4)　$(-9) \times (-3) \div (-3)$

(5)　$(+2) \times (-2) \div \left(-\frac{1}{4}\right)$

(6)　$(+12) \times \left(-\frac{2}{3}\right) \div (+2)$

(7)　$(-7) \times \left(-\frac{3}{4}\right) \div \left(-\frac{7}{4}\right)$

(8)　$(+6) \times \left(-\frac{2}{5}\right) \div \left(-\frac{4}{5}\right)$

(9)　$(+8) \times \left(+\frac{3}{2}\right) \div \left(-\frac{3}{4}\right)$

(10)　$\left(-\frac{5}{2}\right) \times \left(-\frac{8}{5}\right) \div \left(-\frac{4}{7}\right)$

(11)　$\frac{7}{2} \times \left(-\frac{9}{2}\right) \div \frac{7}{4}$

(12)　$\frac{8}{3} \times \left(-\frac{7}{3}\right) \div \left(-\frac{7}{9}\right)$

(13)　$3^2 \div \left(-\frac{3}{2}\right) \div \left(-\frac{3}{5}\right)$

(14)　$3^2 \div (-2^3) \times \left(-\frac{8}{9}\right)$

(15)　$4^2 \div (-2^3) \times \frac{5}{2}$

(16)　$\frac{1}{2} \div \left(-\frac{1}{3}\right) \div \frac{1}{4}$

正の数と負の数 [乗法と除法の混じった計算]

<演習問題>
次の計算をせよ。

(1)　$(+8) \times (-2) \div (+4)$

$(+8) \times (-2) \div (+4) = -\left(8 \times 2 \times \dfrac{1}{4}\right)$

$= 4$

(2)　$(+4) \times (-6) \div (-12)$

$(+4) \times (-6) \div (-12) = +\left(4 \times 6 \times \dfrac{1}{12}\right)$

$= 2$

(3)　$(-6) \times (-2) \div (+3)$

$(-6) \times (-2) \div (+3) = +\left(6 \times 2 \times \dfrac{1}{3}\right)$

$= 4$

(4)　$(-9) \times (-3) \div (-3)$

$(-9) \times (-3) \div (-3) = -\left(9 \times 3 \times \dfrac{1}{3}\right)$

$= -9$

(5)　$(+2) \times (-2) \div \left(-\dfrac{1}{4}\right)$

$(+2) \times (-2) \div \left(-\dfrac{1}{4}\right) = +(2 \times 2 \times 4)$

$= 16$

(6)　$(+12) \times \left(-\dfrac{2}{3}\right) \div (+2)$

$(+12) \times \left(-\dfrac{2}{3}\right) \div (+2) = -\left(12 \times \dfrac{2}{3} \times \dfrac{1}{2}\right)$

$= -4$

(7)　$(-7) \times \left(-\dfrac{3}{4}\right) \div \left(-\dfrac{7}{4}\right)$

$(-7) \times \left(-\dfrac{3}{4}\right) \div \left(-\dfrac{7}{4}\right) = -\left(7 \times \dfrac{3}{4} \times \dfrac{4}{7}\right)$

$= -3$

(8)　$(+6) \times \left(-\dfrac{2}{5}\right) \div \left(-\dfrac{4}{5}\right)$

$(+6) \times \left(-\dfrac{2}{5}\right) \div \left(-\dfrac{4}{5}\right) = +\left(6 \times \dfrac{2}{5} \times \dfrac{5}{4}\right)$

$= 3$

(9)　$(+8) \times \left(+\dfrac{3}{2}\right) \div \left(-\dfrac{3}{4}\right)$

$(+8) \times \left(+\dfrac{3}{2}\right) \div \left(-\dfrac{3}{4}\right) = -\left(8 \times \dfrac{3}{2} \times \dfrac{4}{3}\right)$

$= -16$

(10)　$\left(-\dfrac{5}{2}\right) \times \left(-\dfrac{8}{5}\right) \div \left(-\dfrac{4}{7}\right)$

$\left(-\dfrac{5}{2}\right) \times \left(-\dfrac{8}{5}\right) \div \left(-\dfrac{4}{7}\right) = -\left(\dfrac{5}{2} \times \dfrac{8}{5} \times \dfrac{7}{4}\right)$

$= -7$

(11)　$\dfrac{7}{2} \times \left(-\dfrac{9}{2}\right) \div \dfrac{7}{4}$

$\dfrac{7}{2} \times \left(-\dfrac{9}{2}\right) \div \dfrac{7}{4} = -\left(\dfrac{7}{2} \times \dfrac{9}{2} \times \dfrac{4}{7}\right)$

$= -9$

(12)　$\dfrac{8}{3} \times \left(-\dfrac{7}{3}\right) \div \left(-\dfrac{7}{9}\right)$

$\dfrac{8}{3} \times \left(-\dfrac{7}{3}\right) \div \left(-\dfrac{7}{9}\right) = +\left(\dfrac{8}{3} \times \dfrac{7}{3} \times \dfrac{9}{7}\right)$

$= 8$

(13)　$3^2 \div \left(-\dfrac{3}{2}\right) \div \left(-\dfrac{3}{5}\right)$

$3^2 \div \left(-\dfrac{3}{2}\right) \div \left(-\dfrac{3}{5}\right) = +\left(9 \times \dfrac{2}{3} \times \dfrac{5}{3}\right)$

$= 10$

(14)　$3^2 \div \left(-2^3\right) \times \left(-\dfrac{8}{9}\right)$

$3^2 \div \left(-2^3\right) \times \left(-\dfrac{8}{9}\right) = +\left(9 \times \dfrac{1}{8} \times \dfrac{8}{9}\right)$

$= 1$

(15)　$4^2 \div \left(-2^3\right) \times \dfrac{5}{2}$

$4^2 \div \left(-2^3\right) \times \dfrac{5}{2} = -\left(16 \times \dfrac{1}{8} \times \dfrac{5}{2}\right)$

$= -5$

(16)　$\dfrac{1}{2} \div \left(-\dfrac{1}{3}\right) \div \dfrac{1}{4}$

$\dfrac{1}{2} \div \left(-\dfrac{1}{3}\right) \div \dfrac{1}{4} = -\left(\dfrac{1}{2} \times 3 \times 4\right)$

$= -6$