

正の数・負の数③ 解答と解説

1 解答 (1) +21 (2) +40 (3) -13 (4) -81 (5) 0 (6) 0

(7) -22 (8) +90

(1) $(+7) \times (+3) = +(7 \times 3)$

$= +21$

(2) $(-10) \times (-4) = +(10 \times 4)$

$= +40$

(3) $(+13) \times (-1) = -(13 \times 1)$

$= -13$

(4) $(-9) \times (+9) = -(9 \times 9)$

$= -81$

(5) $(+5) \times 0 = 0$

(6) $0 \times (-3) = 0$

(7) $(-2) \times (+11) = -(2 \times 11)$

$= -22$

(8) $(-15) \times (-6) = +(15 \times 6)$

$= +90$

2 解答 (1) 243 (2) 64 (3) $\frac{16}{81}$ (4) 6.25 (5) -81 (6) $-\frac{27}{125}$

(7) 343 (8) 49

(1) $3^5 = 3 \times 3 \times 3 \times 3 \times 3 = 243$

(2) $(-8)^2 = (-8) \times (-8) = 64$

(3) $\left(-\frac{2}{3}\right)^4 = \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) = \frac{16}{81}$

(4) $(-2.5)^2 = (-2.5) \times (-2.5) = 6.25$

(5) $-3^4 = -(3 \times 3 \times 3 \times 3) = -81$

(6) $-\left(\frac{3}{5}\right)^3 = -\left(\frac{3}{5} \times \frac{3}{5} \times \frac{3}{5}\right) = -\frac{27}{125}$

(7) $-(-7)^3 = -\{(-7) \times (-7) \times (-7)\} = -(-343) = 343$

(8) $-(-7^2) = -\{-(7 \times 7)\} = -(-49) = 49$

3 解答 (1) -32 (2) -135 (3) 400 (4) 216 (5) 1 (6) -15

(1) $-2 \times (-4)^2 = -2 \times (-4) \times (-4) = -32$

(2) $3^3 \times (-5) = 3 \times 3 \times 3 \times (-5) = -135$

(3) $(-4)^2 \times 5^2 = (-4) \times (-4) \times 5 \times 5 = 400$

(4) $(3 \times 2)^3 = 6^3 = 6 \times 6 \times 6 = 216$

(5) $(-2)^2 \times \frac{1}{4} = (-2) \times (-2) \times \frac{1}{4} = 1$

(6) $\frac{5}{9} \times (-3)^3 = \frac{5}{9} \times (-3) \times (-3) \times (-3) = -15$

4 解答 (1) 54 (2) 4 (3) 72 (4) -256 (5) $\frac{1}{3}$

(1) $6 \times 3^2 = 6 \times 9$

$= 54$

(2) $(2-3-1)^2 = (-2)^2$

$= 4$

(3) $-3^2 \times (-2)^3 = -9 \times (-8)$

$= 72$

(4) $(-2)^4 \times (-4)^2 = 16 \times (-16)$

$= -256$

(5) $\left(\frac{1}{3}\right)^3 \times (-3)^2 = \frac{1}{27} \times 9$

$= \frac{1}{3}$