Rational numbers: operations, powers and large numbers

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Worked example 1

Evaluate the expression and explain why subtracting a negative becomes addition.

$$(-4) + 7 - (-2)$$

Guided attempt 2

Evaluate, completing the power and product before the subtraction.

$$(-3)^2 - 2 \times 4$$

1. $(-3)^2$ = _____.
2. 2×4 = _____.
3. _____ − _____ = _____.

Prerequisite 3

Add the two negative numbers.

$$-6 + (-3)$$

Prerequisite 4

Calculate the quotient and explain its sign.

$$18 \div (-3)$$

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Independent practice 5

Evaluate and retain the sign of each term.

$$-12-(-5)$$

Independent practice 6

Find the product. Explain how many negative factors determine its sign.

$$(-2)\times(-3)\times(-4)$$

Independent practice 7

Give the exact fraction value.

$$\frac{3}{4}-\frac{5}{6}$$

Independent practice 8

Write 450000 in scientific notation. State the allowed range of the coefficient.

$$450000$$

Exit question 9

Evaluate. Explain why the two squared terms have different signs before addition.

$$-3^2+(-3)^2$$

Exit question 10

Evaluate in the correct order.

$$(8-14)\div 3+2^3$$