

Learning Goal:

By the end of this lesson I should be able to EVALUATE mixed addition and subtraction problems WITHOUT the use of a calculator (technology).

BIG IDEAS

- Adding a negative value gives the same result as subtracting a positive value.

$$5 + (-2) \quad \text{is the same as} \quad 5 - 2$$

- Subtracting a negative value gives the same result as adding a positive value.

$$5 - (-3) \quad \text{is the same as} \quad 5 + 3$$

- **Evaluate** means to get a number answer by performing the given operations (adding/subtracting).

Models: (i) Integer Chip model, (ii) hybrid integer chip model (write numbers instead of drawing chips), (iii) column model (adding), (iv) number model

Skills Practice: EVALUATE the following:

(a) $16 - (-7)$

(b) $15 + (-8)$

(c) $(-9) - (-9)$

(d) $18 - 14 + 6$

(e) $24 - (-11) + (-3)$

(f) $(-35) + (-15)$

(g) $17 - (-14) - 12$

(h) $(-6) - 7 - 5$

(i) $34 - 24 - (-12)$

What operation (adding or subtracting) must be inserted into the black space to make the statement true?

(a) $5 \blacksquare (-3) \blacksquare (-4) = 6$

(b) $20 \blacksquare (-12) \blacksquare (-32) = 0$