

**Two-Step Equations - Integers**

Sheet 1

- 1) Dalia bought a few swirl marbles and divided it equally among four of her friends and her brother, Jake. While playing, Jake lost 2 marbles and has only 7 marbles at present. Find how many marbles did Dalia buy in all.

---

- 2) A bus departed from New York at 11 pm with 44 passengers. An hour later, a few passengers got off at New Jersey. The number of passengers who boarded the bus at New Jersey were twice the number of passengers who got off the bus. If the bus has 50 passengers now, how many passengers got off at New Jersey?

---

- 3) Clara lends half her collection of formal attires to her sister, Susan. Clara then buys four more attires. If she has 12 attires now, how many attires did Clara had initially?

---

- 4) The Rock Zoo nurses 37 species of big cats. Recently, a few species of big cats were sponsored to other zoos around the country. The zoo now nurses only 25 species. How many species of big cats were sponsored to other zoos?

---

- 5) Megan and four of her friends plan to go for a long drive. She buys 12 bottles of frappe and a few bottles of orange juice from a supermarket. The total number of bottles they have are four times that of orange juice bottles. How many bottles of orange juice did Megan buy?

---

**Answer key****Two-Step Equations - Integers**

Sheet 1

- 1) Dalia bought a few swirl marbles and divided it equally among four of her friends and her brother, Jake. While playing, Jake lost 2 marbles and has only 7 marbles at present. Find how many marbles did Dalia buy in all.

$$\frac{x}{5} - 2 = 7 ; 45 \text{ marbles}$$

---

- 2) A bus departed from New York at 11 pm with 44 passengers. An hour later, a few passengers got off at New Jersey. The number of passengers who boarded the bus at New Jersey were twice the number of passengers who got off the bus. If the bus has 50 passengers now, how many passengers got off at New Jersey?

$$44 - x + 2x = 50 ; 6 \text{ passengers}$$

---

- 3) Clara lends half her collection of formal attires to her sister, Susan. Clara then buys four more attires. If she has 12 attires now, how many attires did Clara had initially?

$$\frac{x}{2} + 4 = 12 ; 16 \text{ attires}$$

---

- 4) The Rock Zoo nurses 37 species of big cats. Recently, a few species of big cats were sponsored to other zoos around the country. The zoo now nurses only 25 species. How many species of big cats were sponsored to other zoos?

$$37 - x = 25 ; 12 \text{ species}$$

---

- 5) Megan and four of her friends plan to go for a long drive. She buys 12 bottles of frappe and a few bottles of orange juice from a supermarket. The total number of bottles they have are four times that of orange juice bottles. How many bottles of orange juice did Megan buy?

$$12 + x = 4x ; 4 \text{ bottles}$$

---