

Expressions and Equations

Expressions:

1. A) $45p - 11$
- B) $9 + y$
- C) $32x$
- D) $d + d + d$
- E) Seven more than a number. $x + 7$
- F) A number decreased by twenty three. $p - 23$
- G) A number split nine ways. $n/9$
- H) six times a number. $6t$

Equations:

2. I) $7 + t = 32$
- J) $c + c + c + c + c = 5c$
- K) $35k + 11 = 186$
- L) $18 - q = 11$
- M) $4r = 50$
- N) The difference between two numbers is fifteen. $n - s = 15$

- O) Thirty divided by a number is ten. $30/n = 10$
- P) A number increased by eleven is eighty one. $n + 11 = 81$
- Q) Five more than three times a number is seventeen. $3b + 5 = 17$

Solving Equations:

$$3.) \quad 12 + s = 40$$

$$12 - 12 + s = 40 - 12$$

$$s = 28$$

$$4.) \quad n + n + n + n = 20$$

$$4n = 20$$

$$\frac{4n}{4} = \frac{20}{4}$$

$$n = 5$$

$$5.) \quad 2x + 6 = 26$$

$$2x + 6 - 6 = 26 - 6$$

$$2x = 20$$

$$\frac{2x}{2} = \frac{20}{2}$$

$$x = 10$$

Review:

- ▶ Systematic Trial Method
- ▶ Inspection
- ▶ Visual Representation using - Balance Scale Method and Tiles.

Word Problems:

- 6.) Jonathan collects ancient coins. If he sells sixteen coins and has sixty seven left, how many coins did he start have before he sold some?

$$c - 16 = 67$$

$$c - 16 + 16 = 67 + 16$$

$$c = 83$$

Jonathan had eighty three ancient coins before he sold sixteen.

- 7.) Jennifer bought a loose bag of jelly beans for fifty cents. She counted fifty seven jelly beans in the bag. She ate twelve herself and equally split the rest of the jelly beans among her five friends. How many jelly beans did each friend receive?

$$(57 - 12) \div 5 = j$$

$$45 \div 5 = j$$

$$9 = j$$

Jennifer's five friends received nine jelly beans each.

**** Important Note:**

While it is important to develop mental math skills - the ability to arrive at a correct answers in one's mind without doing pencil paper computations - it is equally important that students are able to ***demonstrate their math ability and understanding by showing all workings.*** The examples above are a great reference on how to show one's working.