- 1. A man bought a horse and a cow for \$360, paying 4 times as much for the horse as for the cow. What was the cost of each?
- 2. A has twice as much money as B, and C has as much as A and B together. They all have \$300. How much money has each person?
- 3. Robert has twice as many marbles as William, and Thomas has three times as many as Robert. They all have 180 marbles. How many has each?
- 4. If I buy some oranges at 3% apiece, and the same number of bananas at 2% apiece, how many of each can I buy for 45%? (Let x = number of oranges or bananas. What will represent the number of cents that the oranges cost? the bananas? all?)
- 5. The difference between nine times a certain number and sixteen times that number is 84. What is the number?
- 6. A man is twice as old as his son. If the difference in their ages is 24 years, what is the age of each?
- 7. Three kinds of tea were put together in equal quantities, the prices per pound being 50%, 60%, and 70% respectively. How many pounds of each are there in the mixture that is worth \$14.40?
- 8. A mixture of Java coffee worth 28 a pound, and Mocha coffee worth 30 a pound, is worth in all \$4.56. There is three times as much Java as Mocha. How many pounds of each in the mixture?
- 9. A, B, and C entered into a partnership with a capital of \$10,000. A put in twice as much as B, and C put in \(\frac{1}{2} \) as much as B. What was the capital of each?
- 10. If ½ of A's money is worth ¾ of B's, and B has \$400, what has A?

Simplify:

11.
$$(x+5)+(x+8)$$
; $(x-9)+(x-8)$; $(x-9)+(x-12)$.

12.
$$(3x+10)-(2x+5)$$
; $(4x-20)-(2x-8)$; $(12x-30)-(6x-20)$.
13. $(2a+3b)+(3a+2b)$; $(5a-2b)+(2a+3b)+(2a+3b)+(3a+2b)$.

13.
$$(2a+3b)+(3a+2b)$$
; $(5a-2b)+(2a-3b)$; $(8a-6b)+(3a-4b)$.

14. $(8a-4b)-(6a-2b)$; $(9a-6b)-(9a-6b)$; $(9a-6b)-(9a-6b)-(9a-6b)$; $(9a-6b)-(9a-6b)-(9a-6b)$; $(9a-6b)-(9a-6b)-(9a-6b)$; $(9a-6b)-(9a-6b)-(9a-6b)$; $(9a-6b)-(9a-6b)-(9a-6b)$;

14.
$$(8a-4b)-(6a-2b)$$
; $(9a-6b)-(2a-5b)$; $(8a-6b)+(3a-4b)$.
15. $(x+2)\times 4$; $(3x+8)\times 8$; $(4x-3)\times 4$; $(2x-8)\times 6$.