

**Answers** (equations may vary)

1. 24 oranges, 28 apples;  $x + (x + 4) = 52$ ,  $x = \text{oranges}$
2. Cleo 230 miles, Thu 290 miles;  $x + (x + 60) = 520$ ,  $x = \text{Cleo}$
3. 42, 84;  $x + 2x = 126$ ,  $x = \text{short piece}$
4. 6.7 kg.;  $x + 5x = 8$ ,  $x = \text{weight of bucket}$
5. 15, 35;  $2x + 2(2x + 5) = 100$ ,  $x = \text{width}$
6. 12, 35;  $2x + 2(3x - 1) = 94$ ,  $x = \text{width}$
7. 45, 46, 47;  $x + (x + 1) + (x + 2) = 138$   $x = \text{first number}$
8. 154, 156, 158;  $x + (x + 2) + (x + 4) = 468$   $x = \text{first number}$
9. 25, 12.5, 19.5;  $x + 2x + (x + 7) = 57$   $x = \text{second side}$
10. 20, 36, 30;  $x + (2x - 4) + (x + 10) = 86$   $x = \text{smallest side}$
11. 200 adult, 230 students;  $5x + 2(x + 30) = 1460$ ,  $x = \text{adult tickets}$
12. 130 single, 180 couple;  $10x + 15(x + 50) = 4000$ ,  $x = \text{"singles" tickets}$
13. 7 nickels, 14 dimes, 12 quarters;  $0.05x + 0.10(2x) + 0.25(x + 5) = 4.75$ ,  $x = \text{nickels}$
14. 12 nickels, 15 dimes, 30 quarters;  $0.05x + 0.10(x + 3) + 0.25(2x + 6) = 9.60$ ,  $x = \text{nickels}$
15. \$1250;  $x + 0.08x = 1350$  16. 10,200;  $x + 0.075x = 10,965$   $x = \text{amount invested}$   $x = \text{original value of her fund}$
16. \$10200;  $1.075x = 10965$ ,  $x = \text{amount invested}$