Module 1   Number Sense
Lesson 4   Distributive Properties

Set 1

1 Use the Distributive Property to model (16)(14).

2 Use the Distributive Property to model (18)(23).

3 Give an example to show that addition is not distributive over multiplication.

Set 2

Use the Distributive Property to solve the following.

1 A man bought 5 suits at $395 each and 3 shirts at $42 each. How much did he spend altogether?

2 Zeo earns $14 an hour and works 23 hours per week. How much money does Zeo earn in 18 weeks?

Possible Answers

Set 1

1. (16)(14)
    (10 + 6)(10+4)
    10(10 + 4) + 6(10 + 4)
    100 + 40 + 60 + 24
    224

2. (18)(23)
    (10 + 8)(20 + 3)
    10(20 + 3) 8(20 + 3)
    200 + 30 + 160 + 24
    414

3. Possible answer:
    2 + (3 + 4) = 2 + 12 = 14
    (2 + 3)(2 + 4) = (5)(6) = 30
            so
    2 + (3 + 4) ≠ (2 + 3)(2 + 4)

Set 2

1. 5(395) + 3(42)
    5(300 + 90 + 5) + 3(40 + 2)
    1,500 + 450 + 25 + 120 + 6
    2,101

    The man spent $2,101.

2. (14)(23)(18)
    [(10 + 4)(20 + 3)] (10 + 8)
    (322)(10 + 8)
    322(10) + 8(300 + 20 + 2)
    3,220 + 2,400 + 160 + 16
    5,796

    Zeo earned $5,796.