

EXAMPLE 4

Four friends use an online code to get discounts on concert tickets. They spent \$312 for the four tickets. What was the price of one ticket without the discount?

$$4(x - 15) = 312$$

$$4x - 60 = 312$$

$$+60 \quad +60$$

$$4x = 372$$

$$\frac{4x}{4} = \frac{372}{4}$$

$$x = 93$$

One ticket without a discount is \$93

Your order details are shown below for your reference.

ORDER # 328
Sec B, Row 10, Seats 13-16

	Quantity	Price
Tickets	4	?
Discount	\$15.00	4 × \$15.00
Order Total		\$312

Example 5 Solve Work and Time Problems

LaTanya will walk her bike from her house to the bike shop, which is 1.5 mi from her house, to get the bike fixed. She expects to wait 30 min for the repair. Then she will ride her bike home. Can she be home in one hour?

Walking time

$$\frac{1.5 \text{ mi}}{x \text{ h}} = \frac{3 \text{ mi}}{1 \text{ h}}$$

$$\frac{1.5}{3} = \frac{3x}{3} \quad x = 0.5$$

+

Wait

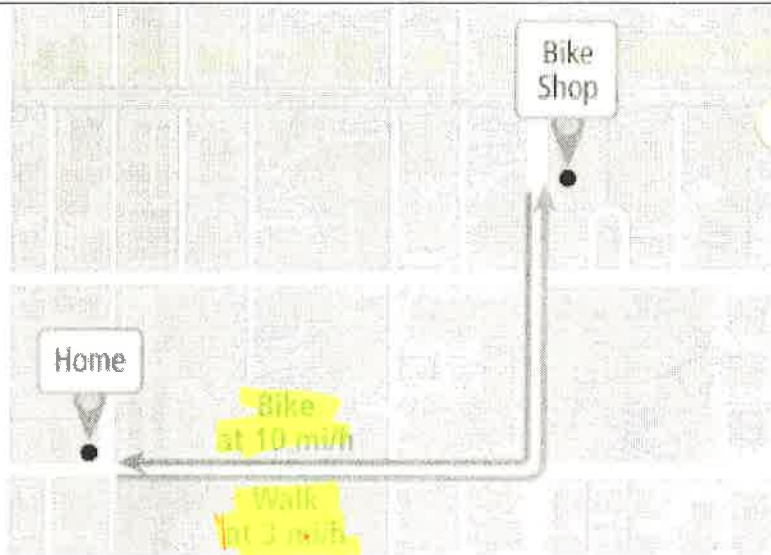
30min or 0.5

+

bike ride

$$\frac{1.5 \text{ mi}}{x \text{ h}} = \frac{10 \text{ mi}}{h}$$

$$\frac{1.5}{10} = \frac{10x}{10} \quad x = 0.15$$



Latanya will not be able to get home in one hour because it will take 1.15 hours.