USING MENTAL MATH **In Exercises 43–46, use the example below to find the total cost.**

EXAMPLE **Use the distributive property and mental math**

Use the distributive property and mental math to find the total cost of 5 picture frames at $1.99 each.

Total cost	$= 5(1.99)$	Write expression for total cost.
	$= 5(2 - 0.01)$	Rewrite 1.99 as $2 - 0.01$.
	$= 5(2) - 5(0.01)$	Distributive property
	$= 10 - 0.05$	Multiply using mental math.
	$= 9.95$	Subtract. The total cost is $9.95.

43. 3 CDs at $12.99 each

44. 5 magazines at $3.99 each

45. 6 pairs of socks at $1.98 per pair

46. 25 baseballs at $2.98 each

TRANSLATING PHRASES **In Exercises 47 and 48, translate the verbal phrase into an expression. Then simplify the expression.**

47. Twice the sum of 6 and x, increased by 5 less than x

48. Three times the difference of x and 2, decreased by the sum of x and 10

49. **CHALLENGE** How can you use $a(b + c) = ab + ac$ to show that $(b + c)a = ba + ca$ is also true? *Justify* your steps.

PROBLEM SOLVING

EXAMPLE 5 on p. 98 for Exs. 50–52

50. **SPORTS** An archer shoots 6 arrows at a target. Some arrows hit the 9 point ring, and the rest hit the 10 point bull's-eye. Write an equation that gives the score s as a function of the number a of arrows that hit the 9 point ring. Then find the score if 2 arrows hit the 9 point ring.

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51. **MOVIES** You have a coupon for $2 off the regular cost per movie rental. You rent 3 movies, and the regular cost of each rental is the same. Write an equation that gives the total cost C (in dollars) as a function of the regular cost r (in dollars) of a rental. Then find the total cost if a rental regularly costs $3.99.

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52. **TAKS REASONING** Each day you use your pay-as-you-go cell phone you pay $.25 per minute for the first 10 minutes and $.10 per minute for any time over 10 minutes. Write an equation that gives the daily cost C (in dollars) as a function of the time t (in minutes) when usage exceeds 10 minutes. Which costs more, using the phone for 10 minutes today and 15 minutes tomorrow, or using the phone for 25 minutes today? *Explain*.

= WORKED-OUT SOLUTIONS on p. WS1

= TAKS PRACTICE AND REASONING