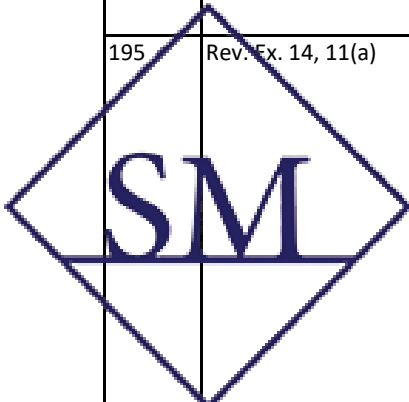


188	Ex. 14.5, 4	Solution: Replace the word “breadth” with “ ”.
191	Ex. 14.5, 15(c)	Solution: Second line: $x = \frac{-2 \pm \sqrt{2^2 - 4(4)(-25)}}{2(4)}$ Last line: $= 2.26 \text{ or } -2.76$
191	Ex. 14.5, 15(d)	Solution: When $x = 2.26$, time taken by tap A = $\frac{50}{2.26}$ $= 22.1 \text{ min}$
192	Rev. Ex. 14, 4(b)	Solution: $36x^2 + 12x - 1 = 0$ $x = \frac{-12 \pm \sqrt{12^2 - 4(12)(-1)}}{2(36)}$ $x = \frac{-12 \pm \sqrt{288}}{2(36)}$ $x = \frac{-12 + \sqrt{288}}{2(36)} \text{ or } x = \frac{-12 - \sqrt{288}}{2(36)}$ $x = 0.0690 \text{ or } x = -0.402$ (rounded to 3 sig. fig.)
193	Rev. Ex. 14, 5(a)	Solution: Third line: $x + 1 = \pm\sqrt{36}$
193	Rev. Ex. 14, 6(d)	Solution: Third line: $\frac{15x - 1}{9x^2 - 1} = -\frac{1}{3x}$
194	Rev. Ex. 14, 8	Solution: $= 55.2$ or (rejected) \therefore the train's average speed is 55.2 mph .
194	Rev. Ex. 14, 10(a)(iii)	Solution: $(24 \times 17) + 12 = 420$
194	Rev. Ex. 14, 10(b)	Solution: $(24 - x)(17 + x) = 420$ $408 + 24x - 17x - x^2 = 420$ $-x^2 + 7x + 12 = 0$ $(x - 4)(x - 3) = 0$ $x = 4 \text{ or } x = 3$
195	Rev. Ex. 14, 11	Solution: Put (b) farther down, in front of the line Perimeter of rectangle A.
195	Rev. Ex. 14, 11(a)	Solution: Use the current material under (a) and then the material under (b) up to the line that says “Perimeter of rectangle A” with the following corrections, starting with the last correct line of solution: $3x^2 + 6x - 32 = 0$ $x = \frac{-6 \pm \sqrt{(-6)^2 - 4(3)(-32)}}{2(3)}$ $= \frac{-6 \pm \sqrt{36 + 384}}{6}$ $= \frac{-6 + \sqrt{420}}{6} \text{ or } \frac{-6 - \sqrt{420}}{6}$ $= 2.42 \text{ or } -4.42 \text{ (rejected)}$ (rounded to 3 sig. fig.) $\text{Width of rectangle B} = \frac{16}{2.42 + 2} = 3.62 \text{ m}$



195	Rev. Ex. 14, 11(b)	<p>Solution: Perimeter of rectangle A</p> $= 2\left(x + \frac{16}{x}\right)$ $= 2\left(2.42 + \frac{16}{2.24}\right)$ $= 18.1 \quad (\text{rounded to 3 sig. fig.})$ <p>Perimeter of rectangle B</p> $= 2\left[\left(x+2\right) + \frac{16}{x+2}\right]$ $= 2\left[\left(2.42+2\right) + \frac{16}{2.42+2}\right]$ $= 16.1 \quad (\text{rounded to 3 sig. fig.})$ <p>\therefore Garden plot A has the greater perimeter.</p>
195	Rev. Ex. 14, 12(a)(ii)	Solution: Second line: $2x^2 + 7x - 1,400 = 0$
195	Rev. Ex. 14, 12(c)	Solution: When $x = -30.19$, the number of gallons used when ...

