

2.3 Translating

1. $x = .05(8) = .4$
2. $5x - 4 = 16; x = 4$
3. $.065x = 12.44; x = 191.38$
4. $3x + 7 = 22; x = 5$
5. $7 + 2x = 11; x = 2$
6. $\frac{2}{3}x = 20; x = 30$
7. $13x = 221; x = 17$
8. $17x = 403; x = \frac{403}{17}$
9. $3.7x = 8.51; x = 2.3$
10.
 - a. Let x = price per acre.
 - b. $43x = 36,550$
 - c. $x = 850$
 - d. The average price per acre is \$850.
11.
 - a. Let x = amount of each student contribution.
 - b. $18x = 59.40$
 - c. $x = 3.3$
 - d. Each student must contribute \$3.30 .
12.
 - a. Let x = mph.
 - b. $7x = 126$
 - c. $x = 18$
 - d. The driver must average 18 mph.
13.
 - a. Let x = ave. train mph.
 - b. $24x = 1052.4$
 - c. $x = 43.85$
 - d. The average train rate is 43.85 mph.
14.
 - b. $\frac{3}{10}x = 2100$
 - c. $x = 7000$
 - d. The cost of the car is \$7000.
15.
 - b. $\frac{5}{8}x = 343$
 - c. $x = 548.8$
 - d. The number is 548.8 .
16.
 - a. Let x = area of Lake Michigan.
 - b. $\frac{2}{5}x = 9200$
 - c. $x = 23,000$
 - d. The area of Lake Michigan is 23,000 square miles.
17.
 - a. Let x = cost of Suez Canal
 - b. $\frac{3}{8}x = 37,500,000$
 - c. $x = 100,000,000$
 - d. The Suez Canal cost \$100,000,000 .