

10. $a = 0.2 \cdot 150$; 30

12. $35 = 0.35 \cdot w$; 100

14. $29 = p \cdot 20$; 145%

20. \$200

28. a. 80 students

b. 30 students

- 29. a.** Answer the question: What number is 66% of 550 gallons?

$$a = p \bullet w = 0.66 \bullet 550 = 363$$

There are 363 gallons of water in tank *A*.

- b.** Set up a proportion using the fact that the ratio of the capacity of tank *A* to tank *B* is 11:15.

$$\frac{\text{capacity of tank } A}{\text{capacity of tank } B} = \frac{11}{15}$$

$$\frac{550}{\text{capacity of tank } B} = \frac{11}{15}$$

$$\begin{aligned}\text{Capacity of tank } B &= \frac{550 \bullet 15}{11} \\ &= \frac{8250}{11} \\ &= 750\end{aligned}$$

The capacity of tank *B* is 750 gallons.

- c.** Answer the question: What number is 53% of 750 gallons?

$$a = p \bullet w = 0.53 \bullet 750 = 397.5$$

There are 397.5 gallons of water in tank *B*.

32. 0.6

33. 0.88