

2.1 The Properties of Equality

MULTIPLE CHOICE

1. Solve: $x + 7 = 23$

- a. $x = 161$
- b. $x = \frac{23}{7}$
- c. $x = 30$
- d. $x = 16$

ANS: D PTS: 1

2. Solve: $21 = x - 15$

- a. $x = 6$
- b. $x = 36$
- c. $x = \frac{7}{5}$
- d. $x = 315$

ANS: B PTS: 1

3. Solve: $k + 27 = -3$

- a. $k = -30$
- b. $k = 30$
- c. $k = 24$
- d. $k = -24$

ANS: A PTS: 1

4. Solve: $c + \frac{1}{6} = -\frac{5}{6}$

- a. $c = -1$
- b. $c = 1$
- c. $c = \frac{2}{3}$
- d. $c = -\frac{2}{3}$

ANS: A PTS: 1

5. Solve: $h - \frac{3}{15} = \frac{27}{15}$

- a. $h = \frac{8}{5}$
- b. $h = -2$

c. $k = -\frac{8}{5}$

d. $k = 2$

ANS: D PTS: 1

6. Solve: $-6w = -18$

a. $w = 3$

b. $w = -24$

c. $w = -3$

d. $w = -12$

ANS: A PTS: 1

7. Solve: $\frac{2}{5}w = -12$

a. $w = 30$

b. $w = \frac{24}{5}$

c. $w = -\frac{24}{5}$

d. $w = -30$

ANS: D PTS: 1

8. Solve: $-\frac{4}{3}k = -20$

a. $k = \frac{80}{3}$

b. $k = 15$

c. $k = -15$

d. $k = -\frac{80}{3}$

ANS: B PTS: 1

9. Solve: $x - 0.75x = 8$

a. $x = 32$

b. $x = 8.75$

c. $x = 7.25$

d. $x = 2$

ANS: A PTS: 1

10. Solve: $\frac{z}{104} = \frac{7}{26}$

a. $z = \frac{7}{2704}$

b. $z = 28$

c. $z = \frac{1}{28}$

d. $z = 26$

ANS: B PTS: 1

11. Solve: $\frac{y}{15} = \frac{9.3}{45}$

a. $y = \frac{9.3}{675}$

b. $y = 3.1$

c. $y = 3$

d. none of these

ANS: B PTS: 1

12. Solve: $40 = -w - 0.6w$

a. $w = -60$

b. $w = -25$

c. $w = -64$

d. $w = 60$

ANS: B PTS: 1

13. Solve: $\frac{1}{3} = x - \frac{7}{5}$

a. $x = -\frac{16}{15}$

b. $x = \frac{26}{15}$

c. $x = -\frac{5}{21}$

d. $x = \frac{5}{21}$

ANS: B PTS: 1

14. The sale price of a dishwasher is \$276. This dishwasher has been discounted 31%. Find the original price. Round to the nearest hundredth.

a. \$400.00

b. \$85.56

c. \$307.00

d. \$361.56

ANS: A PTS: 1

15. An IV contains 450 mg of a drug in a 1000 mL solution. Find the amount of solution to give a patient who requires 600 mg of the drug. Round to the nearest tenth if necessary.
- a. 1333.3 mL
 - b. 270 mL
 - c. 1500 mL
 - d. 1200 mL

ANS: A PTS: 1