

Answers for Lesson 2-4, pp. 84-85 Exercises

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1. true;  $14 = 14$
2. open; variable
3. true;  $15 = 15$
4. open; variable
5. false;  $7 \neq 8$
6. open; variable
7. true;  $20 = 20$
8. open; variable
9. false;  $27 \neq 30$
10.  $4(-5) = -20$ ; true;  $-20 = -20$
11.  $25 = v + 15$ ; open; variable
12. yes
13. no
14. yes
15. yes
16. no
17. no
18. no
19. no
20. yes
21.  $140 + d = 192$ ; yes
22.  $850 + x = 1,200$ ; no
23. True; for example  $3 + 2 = 7$ .
24. False;  $3w - 7$  is not an equation.
25. True; by definition, an open sentence is one that contains a variable.
26. True; for example,  $x = x$ .
27. true;  $18 = 18$
28. false;  $48 \neq 108$
29. open; variable
30. true;  $10 = 10$
31. true;  $12 = 12$
32. open sentence; contains a variable
33.  $(-20)(9) = -180$ ; false;  $-180 \neq -11$
34.  $15 + n = 50$ ; open; contains a variable
35.  $48 \div 12 = 4$ ; false;  $4 \neq 3$
36. No; an expression is not a sentence.

37. yes;  $-9 = -9$

38. no;  $14 \neq 2$

39. no;  $-6 \neq 6$

40. yes;  $2 = 2$

41-43. Answers may vary. Samples are given.

41. London is the capital of England. Water is made of hydrogen and oxygen.

42. Hawaii is in the Atlantic Ocean. Potatoes are a fruit.

43. She has new shoes. It has six legs.