Math Worksheet for 7th Grade

Two-step equations with decimals and fractions

Name: Due Date: Teacher: Parent Sign:

Questions

1. Solve: $2x + 3 = 11$
2. Solve: $3x - 5 = 10$
3. Solve: $0.5x + 4 = 7$
4. Solve: $1.25x - 2.5 = 5$
5. Solve: $(\frac{1}{2})x + 1 = 5$
6. Solve: $(\frac{3}{4})x - 2 = 7$
7. Solve: $\frac{x}{5} + 3 = 8$
8. Solve: $4x + 1.2 = 9.2$
9. Solve: $0.2x - 1 = 3$
10. Solve: $(\frac{2}{3})x + 4 = 10$
11. Solve: $5x - 0.5 = 4.5$
12. Solve: $(\frac{5}{6})x + 1 = 6$
13. Solve: $\frac{x}{8} - 0.75 = 1.25$
14. Solve: $0.75x + 2.25 = 5.25$
15. Solve: $(\frac{4}{5})x - 3 = 1$
16. Solve: $2.5x + 0.5 = 6$
17. Solve: $\frac{x}{3} + 0.6 = 2.6$
18. Solve: $(\frac{3}{5})x - 1 = 2$
19. Solve: $0.4x + 1.6 = 3.6$
20. Solve: $(\frac{2}{5})x + 2 = 6$
21. Solve: $6x - 2.4 = 3.6$
22. Solve: $\frac{x}{4} + 0.25 = 1.25$
23. Solve: $(\frac{1}{3})x + 5 = 8$
24. Solve: $0.6x - 0.3 = 2.7$
25. Solve: $(\frac{2}{7})x + 1 = 3$
26. Solve: $7x + 0.7 = 7.7$
27. Solve: $\frac{x}{6} - 0.5 = 0.5$
28. Solve: $0.25x + 3.75 = 5.75$
29. Solve: $(\frac{5}{8})x - 2 = 3$
30. Solve: $3x + 1.5 = 7.5$
31. Solve: $(\frac{4}{3})x + 2 = 8$

32. Solve: 0.8x - 1.2 = 2.8

33. Solve: $\frac{x}{2}$ + 4.5 = 7

34. Solve: $(\frac{6}{5})$x - 1 = 5

35. Solve: 2.5x + 1 = 6

Find the mistake — each shows a student's incorrect steps. Identify the mistake and give the correct solution.

36. Equation: 0.5x + 2 = 5. Student: 0.5x = 3; then divided both sides by 3 to get x = 1.

37. Equation: $(\frac{1}{4})$x - 3 = 5. Student: $(\frac{1}{4})$x = 8; then multiplied both sides by $\frac{1}{4}$ to get x = 2.

38. Equation: $(\frac{3}{5})$x + 4 = 7. Student: $(\frac{3}{5})$x = 3; then divided both sides by 3 to get x = 1.

39. Equation: 0.25x + 1 = 3. Student: 0.25x = 2; then multiplied both sides by 0.25 to get x = 0.5.

40. Equation: $(\frac{5}{6})$x + 2 = 7. Student: $(\frac{5}{6})$x = 5; then divided both sides by 5 to get x = $\frac{1}{6}$.

41. Equation: $\frac{x}{5}$ - 2 = 3. Student: $\frac{x}{5}$ = 5; then divided both sides by 5 to get x = 1.

42. Equation: 0.6x - 0.6 = 2.4. Student: 0.6x = 1.8; then divided both sides by 6 to get x = 0.3.

43. Equation: $(\frac{2}{7})$x + 1 = 3. Student: $(\frac{2}{7})$x = 2; then divided both sides by 2 to get x = 1.

44. Equation: 1.5x + 2 = 8. Student: 1.5x = 6; then divided both sides by 1.5 and got x = 2.

45. Equation: $(\frac{4}{5})$x - 3 = 1. Student: $(\frac{4}{5})$x = 4; then multiplied both sides by $\frac{4}{5}$ to get x = $\frac{16}{5}$.

46. Equation: 0.2x + 0.8 = 1.8. Student: 0.2x = 1.0; then divided both sides by 2 to get x = 0.5.

47. Equation: $(\frac{7}{10})$x - 0.5 = 1.5. Student: $(\frac{7}{10})$x = 2.0; then multiplied both sides by $\frac{7}{10}$ to get x = 1.4.

48. Equation: $\frac{x}{9}$ + 1.2 = 2.2. Student: $\frac{x}{9}$ = 1.0; then divided both sides by 9 to get x = 0.111...

49. Equation: $(\frac{3}{4})$x + 2.5 = 5.5. Student: $(\frac{3}{4})$x = 3.0; then multiplied both sides by $\frac{3}{4}$ to get x = 2.25.

50. Equation: 2.2x - 1.1 = 3.3. Student: 2.2x = 2.2; then x = 1.