

Name: Key

Date: _____

Beacon Summer Homework for 2014-2015 Algebra 1 Students:

This homework will help you "freshen up" your math skills over the summer so you are ready for Beacon mathematics in September. This homework will be checked when you return to school. A quiz on this material will be given when you return to school.

If you would like additional tutorials and/or practice, check out khanacademy.com or math.com and search "Pre-Algebra."

On all problems, perform the indicated operations WITHOUT a calculator. Simplify all fractions completely. **Show ALL your work to indicate how you got your solution.** Homework with no work will earn a zero.

1.
$$\begin{array}{r} 1334 \\ 2179 \\ + 6119 \\ \hline 9632 \end{array}$$

2.
$$\begin{array}{r} 47.06 \\ + 0.80 \\ \hline 47.86 \end{array}$$

3.
$$\begin{array}{r} 34003 \\ - 276 \\ \hline 3727 \end{array}$$

4.
$$\begin{array}{r} 12.40 \\ - 3.63 \\ \hline 8.77 \end{array}$$

5. $6.1 + 3.48 + 0.5$
$$\begin{array}{r} 6.10 \\ 3.48 \\ + 0.50 \\ \hline 10.08 \end{array}$$

6. $37.09 - 19$
$$\begin{array}{r} 37.09 \\ - 19.00 \\ \hline 18.09 \end{array}$$

7.
$$\begin{array}{r} 79 \\ \times 87 \\ \hline 553 \\ + 6320 \\ \hline 6873 \end{array}$$

8.
$$\begin{array}{r} 907 \\ \times 708 \\ \hline 7256 \\ 0000 \\ + 634900 \\ \hline 642,156 \end{array}$$

9. 6.09×4
$$\begin{array}{r} 6.09 \\ \times 4 \\ \hline 24.36 \end{array}$$

10.
$$\begin{array}{r} 5.39 \\ \times 2.4 \\ \hline 2156 \\ + 10780 \\ \hline 12936 \end{array}$$

11. $18 \overline{)3006}$
$$\begin{array}{r} 167 \\ 18 \overline{)3006} \\ - 18 \downarrow \downarrow \\ \hline 1206 \\ - 108 \downarrow \\ \hline 126 \\ - 126 \\ \hline 0 \end{array}$$

12. $0.4 \overline{)3.32}$
$$\begin{array}{r} 8.3 \\ 0.4 \overline{)3.32} \\ - 3.2 \downarrow \\ \hline 12 \\ - 12 \\ \hline 0 \end{array}$$

$$13. 2 \overline{) 660} \begin{array}{r} 30 \\ -660 \\ \hline 00 \end{array}$$

$$14. \frac{4}{9} + \frac{7}{9} = \frac{11}{9}$$

$$15. 8\frac{1}{6} + 3\frac{5}{6}$$

$$11\frac{6}{6}$$

$$12$$

$$16. 7\frac{1}{8} + 12\frac{3}{4}$$

$$7\frac{1}{8} + 12\frac{6}{8}$$

$$19\frac{7}{8}$$

$$17. \frac{3^{\times 5}}{4^{\times 5}} - \frac{2^{\times 4}}{5^{\times 4}}$$

$$\frac{15}{20} - \frac{8}{20} = \frac{7}{20}$$

$$18. 12\frac{1}{4} - 4\frac{5}{8}$$

$$12\frac{2}{8} - 4\frac{5}{8}$$

$$8\frac{-3}{8}$$

$$7\frac{5}{8}$$

$$19. \frac{2}{7} \times \frac{2}{6}$$

$$\frac{4 \div 2}{42 \div 2} = \frac{2}{21}$$

$$20. 6 \times 3\frac{1}{8}$$

$$\frac{6}{1} \times \frac{25}{8} = \frac{150 \div 2}{8 \div 2} = \frac{75}{4}$$

$$21. 9\frac{3}{4} \times 2\frac{7}{8}$$

$$\frac{39}{4} \times \frac{23}{8} = \frac{897}{32}$$

$$22. \frac{3}{7} \div \frac{3}{7} = 1$$

$$23. \frac{5}{9} \div \frac{5}{2}$$

$$\frac{5}{9} \times \frac{2}{5} = \frac{10 \div 5}{45 \div 5}$$

$$\frac{2}{9}$$

$$24. \frac{3}{4} \div 12$$

$$\frac{3}{4} \times \frac{1}{12} = \frac{3 \div 3}{48 \div 3} = \frac{1}{16}$$

$$25. 12\frac{1}{2} \div 2\frac{3}{4}$$

$$\frac{25}{2} \div \frac{11}{4}$$

$$\frac{25}{2} \times \frac{4}{11} = \frac{100 \div 2}{22 \div 2}$$

$$\frac{50}{11}$$

$$29. -3.1 + 6.8$$

$$3.7$$

$$26. -3 + (-8)$$

$$-11$$

$$27. 8 + (-3) + (-11)$$

$$5 + (-11)$$

$$-6$$

$$28. -8 + 4 - 7 - 3$$

$$-4 - 7 - 3$$

$$-11 - 3$$

$$-14$$

$$30. 9 - (-8)$$

$$17$$

$$31. -12 - 20$$

$$-32$$

$$32. -4 + (+18)$$

$$14$$

$$33. -7.2 - (-10.1)$$

$$\begin{array}{r} 28.1 \\ -7.2 \\ \hline 2.9 \end{array}$$

$$34. \frac{2 \times 9}{2 \times 10} + \frac{3 \times 5}{4 \times 5}$$

$$-\frac{18}{20} + \frac{15}{20}$$

$$-\frac{3}{20}$$

$$35. \frac{7 \times 1}{4 \times 2} - \frac{3}{8}$$

$$-\frac{4}{8} - \frac{3}{8}$$

$$-\frac{7}{8}$$

$$36. \frac{2 \times 10}{3 \times 10} - \frac{9 \times 3}{10 \times 3}$$

$$\frac{20}{30} - \frac{27}{30}$$

$$-\frac{7}{30}$$

$$37. \frac{5}{6} - \left(-\frac{5}{3}\right)^2$$

$$\frac{5}{6} - \left(-\frac{10}{6}\right)$$

$$\frac{15 \div 3}{6 \div 3} = \frac{5}{2}$$

$$38. 9 \cdot (-4)$$

$$-36$$

$$39. \left(\frac{3}{4}\right)\left(-\frac{4}{7}\right)$$

$$-\frac{12 \div 4}{28 \div 4} = -\frac{3}{7}$$

$$40. \left(-\frac{2}{3}\right)\left(-\frac{5}{8}\right)$$

$$\frac{10 \div 2}{24 \div 2} = \frac{5}{12}$$

$$41. (-8) \cdot 6$$

$$-48$$

$$42. -11(-3)$$

$$33$$

$$43. 5(-4)(-6)(-2)$$

$$-20(-6)(-2)$$

$$120(-2)$$

$$-240$$

$$44. (-.36)(-.9)$$

$$\begin{array}{r} .5 \\ .36 \\ \cdot 9 \\ \hline .324 \end{array}$$

$$45. 35 \div 7$$

$$5$$

$$46. \frac{-54}{-6}$$

$$9$$

$$47. \frac{0}{-5}$$

$$0$$

$$48. 125 \div (-5)$$

$$-25$$

$$49. \frac{4}{9} \div \left(-\frac{8}{3}\right)$$

$$\frac{4}{9} \times -\frac{3}{8} = \frac{-12}{72}$$

$$-\frac{1}{6}$$

$$50. \left(-\frac{3}{5}\right) \div \left(-\frac{5}{6}\right)$$

$$-\frac{3}{5} \times -\frac{6}{5}$$

$$\frac{18}{25}$$

$$51. (-15) \div 0$$

undefined