



§1 Sunday, 07/12/20 Lesson Printable

§1.1 Multiplying by 101 Problems

1. $1234 \times 101 =$ _____
2. $10.1 \times 234 =$ _____
3. $369 \times 101 =$ _____
4. $34845 \div 101 =$ _____
5. $22422 \div 101 =$ _____
6. $202 \times 123 =$ _____
7. If 6 balls cost \$6.06, then 15 balls cost: \$ _____
8. **$404 \times 1111 =$** _____
9. $(*) (48 + 53) \times 151 =$ _____
10. $(*) 8888 \times 62.5\% \times \frac{5}{11} =$ _____

§1.2 Equation Problems

1. Find $32^2 + 2 \cdot 32 \cdot 68 + 68^2$.
2. Find $2^3 - 3 \cdot 2^2 \cdot 8 + 3 \cdot 2 \cdot 8^2 - 8^3$.
3. Find the slope of the line that goes through (5, 7) and (6, 8).
4. Find the line with a slope of 3 and y-intercept of -2 .
5. Find the equation of the line going through (2, 3) and (7, 13).
6. Find the slope of the line with a y-intercept of 3 and a x-intercept of 4.
7. At what point do the lines $2x + 9y = 7$ and $x = 32 - 4.5y$ intersect?
8. Find the intersection of the lines $y = ax + b$ and $y = cx + d$ in terms of a, b, c, d , given that they are not parallel.
9. (Mathcounts) Chris graphs the line $y = 3x + 7$ in the coordinate plane, while Sebastian graphs the line $y = ax + b$, for some numbers a and b . The x-intercept and y-intercept of Sebastian's line are double the x-intercept and y-intercept of Chris's line, respectively. What is the value of the sum $a + b$?