

Algebra I Worksheet #2 Unit 1 Selected Solutions

Simplify each algebraic expression.

3. $x + x + y + y + y = \underline{2x + 3y}$

6. $ab + ab + ab + ab = \underline{4ab}$

9. $16d + 9d = \underline{25d}$

12. $7y - 9y = \underline{-2y}$

15. $3xy + 7xy = \underline{10xy}$

Find the value of each expression.

18. $\frac{(5 + 2) \cdot 8}{7 \cdot 8} = \underline{56}$

21. $\frac{2 + 3 \cdot (5 - 1)}{2 + 3 \cdot 4} = \underline{14}$
 $\frac{2 + 12}{2 + 12}$

24. $\frac{2 + 3 \cdot 5 - 1}{2 + 15 - 1} = \underline{16}$
 $\frac{17 - 1}{17 - 1}$

27. $\frac{(20 - 8) \div 2}{12 \div 2} = \underline{6}$

Find the value of each expression if $y = 15$.

30. $\frac{y \div 3}{15 \div 3} = \underline{5}$

33. $\frac{2y + 3}{2 \cdot 15 + 3} = \underline{33}$
 $\frac{30 + 3}{30 + 3}$

36. $\frac{y - (10 + 8)}{15 - (10 + 8)} = \underline{-3}$
 $\frac{15 - 18}{15 - 18}$

39. $\frac{20 - y \div 5}{20 - 15 \div 5} = \underline{17}$
 $\frac{20 - 3}{20 - 3}$