

Name: _____ Date: _____

1. Simplify:

$$\frac{3}{7} - \frac{4}{13}$$

2. Simplify:

$$\frac{5}{11} \cdot \left(-\frac{4}{5}\right)$$

3. Find a solution of $6x = 24$.4. Find a solution of $y + 8 = 21$.5. Find a solution of $3b - 7 = -19$ 6. Find a solution of $3x + 5 = 4x$ 7. Find a solution of $6a + 53 = 4 - a$ 8. Find a solution of $8x - 1 = 3x + 3$

9. Solve and check:

$$6w - 9(w - 5) = 18$$

10. Solve and check:

$$6(a - 3) + 3a = -9$$

11. Solve and check:

$$6x - 3 = 24 + 3(x - 3)$$

12. Solve and check:

$$3(y + 4) = 48 + 7y$$

13. Solve and check:

$$14 - (5 - 35y) = 21y + 15$$

14. Solve and check:

$$5[2 - 8(y - 16)] = 16(5y + 2) + 708$$

15. Solve the formula for the given variable.

$$d = rt; r \quad (\text{Physics})$$

16. Solve the formula for the given variable.

$$E = IR; R \quad (\text{Physics})$$

17. Solve the formula for the given variable.

$$PV = nRT; T \quad (\text{Chemistry})$$

18. Solve the formula for the given variable.

$$P = 2L + 2W; L \quad (\text{Geometry})$$

19. Solve the formula for the given variable.

$$V = \frac{1}{3}Ah; h \quad (\text{Geometry})$$

20. Solve the formula for the given variable.

$$P = R - C; C \quad (\text{Business})$$

21. Solve the formula for the given variable.

$$P = \frac{R - C}{n}; C \quad (\text{Business})$$

22. Solve the formula for the given variable.

$$A = P + Prt; r \quad (\text{Business})$$

Answer Key

1. $\frac{11}{91}$

2. $-\frac{4}{11}$

3. 4

4. 13

5. -4

6. 5

7. -7

8. $\frac{4}{5}$

9. 9

10. 1

11. 6

12. -9

13. $\frac{3}{7}$

14. $-\frac{3}{4}$

15. $r = \frac{d}{t}$

16. $R = \frac{E}{I}$

17. $T = \frac{PV}{nR}$

18. $L = \frac{P-2W}{2}$

19. $h = \frac{3V}{A}$

20. $C = -P + R$

21. $C = -Pn + R$

22. $r = \frac{A-P}{Pt}$