

$px + q = r$ — ANSWER KEY

Solve. Undo the addition or subtraction first, then the multiplication.

1. $4n + 20 = 48$

$n = \underline{\quad 7 \quad}$

2. $3k - 1 = 32$

$k = \underline{\quad 11 \quad}$

3. $6m + 8 = 68$

$m = \underline{\quad 10 \quad}$

4. $9t + 18 = 108$

$t = \underline{\quad 10 \quad}$

5. $4t - 5 = 15$

$t = \underline{\quad 5 \quad}$

6. $8k + 3 = 19$

$k = \underline{\quad 2 \quad}$

7. $2k - 1 = 11$

$k = \underline{\quad 6 \quad}$

8. $9y - 13 = 86$

$y = \underline{\quad 11 \quad}$

9. $8m - 15 = 73$

$m = \underline{\quad 11 \quad}$

10. $7n + 2 = 23$

$n = \underline{\quad 3 \quad}$

11. $6n - 14 = 58$

$n = \underline{\quad 12 \quad}$

12. $8y + 13 = 93$

$y = \underline{\quad 10 \quad}$

With negative numbers — ANSWER KEY

Solve. Some numbers and answers are negative.

1. $-4y + 13 = -15$

$y = \underline{\quad 7 \quad}$

2. $9k + 7 = -56$

$k = \underline{\quad -7 \quad}$

3. $-3t + 11 = -19$

$t = \underline{\quad 10 \quad}$

4. $6x - 13 = 47$

$x = \underline{\quad 10 \quad}$

5. $-7y + 13 = -8$

$y = \underline{\quad 3 \quad}$

6. $-9n - 2 = 7$

$n = \underline{\quad -1 \quad}$

7. $-6m + 4 = 58$

$m = \underline{\quad -9 \quad}$

8. $-8k + 7 = -9$

$k = \underline{\quad 2 \quad}$

9. $7y - 14 = -35$

$y = \underline{\quad -3 \quad}$

10. $-9y - 12 = 60$

$y = \underline{\quad -8 \quad}$

11. $8k + 15 = -57$

$k = \underline{\quad -9 \quad}$

12. $4n + 4 = 0$

$n = \underline{\quad -1 \quad}$

$p(x + q) = r$ — ANSWER KEY

Solve. Divide both sides first, or distribute and then solve.

1. $-5(y - 8) = 40$

$y = \underline{\quad 0 \quad}$

2. $2(y - 5) = -6$

$y = \underline{\quad 2 \quad}$

3. $5(m + 7) = 45$

$m = \underline{\quad 2 \quad}$

4. $8(t - 6) = 24$

$t = \underline{\quad 9 \quad}$

5. $-2(t + 4) = -4$

$t = \underline{\quad -2 \quad}$

6. $8(k + 1) = -72$

$k = \underline{\quad -10 \quad}$

7. $9(m + 1) = -81$

$m = \underline{\quad -10 \quad}$

8. $9(m - 5) = -126$

$m = \underline{\quad -9 \quad}$

9. $2(t - 1) = 8$

$t = \underline{\quad 5 \quad}$

10. $9(x - 8) = -162$

$x = \underline{\quad -10 \quad}$

11. $3(y - 6) = -48$

$y = \underline{\quad -10 \quad}$

12. $-5(k + 7) = -20$

$k = \underline{\quad -3 \quad}$

Division equations — ANSWER KEY

Solve. Undo the addition or subtraction, then multiply.

1. $t \div 4 - 2 = -3$

$t = \underline{-4}$

2. $n \div 5 - 9 = -14$

$n = \underline{-25}$

3. $k \div 4 + 9 = 11$

$k = \underline{8}$

4. $n \div 5 - 10 = -13$

$n = \underline{-15}$

5. $y \div 3 + 2 = 12$

$y = \underline{30}$

6. $y \div 3 - 11 = -16$

$y = \underline{-15}$

7. $k \div 3 + 6 = 8$

$k = \underline{6}$

8. $n \div 4 + 8 = 10$

$n = \underline{8}$

9. $x \div 6 + 6 = 9$

$x = \underline{18}$

10. $n \div 5 + 4 = 5$

$n = \underline{5}$

11. $y \div 5 + 8 = 11$

$y = \underline{15}$

12. $m \div 4 + 6 = 11$

$m = \underline{20}$